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Office of Curriculum, Standards and Academic Engagement

Department of Gifted/Talented & Enrichment

NYC Department of Education

Department of Gifted/Talented & Enrichment

Unit of Study

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Office of Gifted/Talented & Enrichment

The Office of Gifted/Talented & Enrichment develops policy and program recommendations to meet the educational needs of New York City public school kindergarten through grade 12 students.

This unit of study has been developed with and for classroom teachers. Feel free to use and adapt any or all materials contained herein.

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CAMBOURNE'S CONDITIONS FOR LEARNING

In the 1960's, researcher Brian Cambourne studied the conditions under which young children acquire language. Cambourne found that children tend to learn most effectively when these eight essential conditions exist in learning environments. In the years since his initial research, Cambourne's findings have come to be known collectively as the *Conditions for Learning*. Educators have studied and replicated the *Conditions for Learning* and found that they are consistent and flexible enough to apply to all subjects and to all learners.

Immersion – Students who are learning to read and write need to be deeply involved in both written and oral language. Immersion refers to the print rich environment that makes this possible. In a learning classroom, a wide variety of meaningful texts are used which include charts, labels, books, and student work. The teacher and students often refer to this variety of texts as part of their daily lives as readers and writers.

Demonstration – Students need clear and powerful examples of effective reading and writing strategies. Teachers model these strategies in a variety of contexts so that students can see what fluent readers, writers and speakers do. It is not enough for the teacher to employ these strategies. The teacher must make them explicit by repeating them in a variety of contexts and at various times.

Expectation – Effective literacy teachers have high expectations for all students. Teachers must communicate both implicitly and explicitly that their students can be fluent readers and writers. At the same time, students learn to expect that they will be fluent readers, writers and speakers. Together, teachers and students build a classroom culture centered around high expectations.

Responsibility – In successful literacy classrooms, everyone shares the responsibility for success. Thoughtful teachers are careful not to create dependent students who rely on the teacher for correction and decision-making. As students begin to take responsibility for their learning, they make more informed and autonomous choices during independent reading and writing.

Approximation – Literate classrooms provide a risk-free environment for students to take small steps when practicing new learning strategies. Effective teachers give students time to practice and master skills as they learn. Making mistakes is seen as part and parcel of the learning process, and students understand the opportunities to learn from mistakes.

Use – Students need multiple opportunities to practice new strategies. Their skill sets grow with familiarity. Students build upon prior knowledge when practicing new skills and strategies.

Response – In an effective classroom, students get accurate and supportive feedback from the teacher. Teachers need to help students build on their prior knowledge and provide timely, focused feedback. Students also need to learn how to respond or convey information effectively. As students develop a self-assessment process, they learn how to respond constructively to the ideas and work of their peers.

Engagement – On-going and continuous opportunities to read, write and speak allow students to practice and gain fluency. Active involvement helps students understand to what degree they can be readers, writers and speakers, thus supporting their fluency and independence. Engagement is an essential factor in the learning process and needs to be built into all aspects of the school day. Unengaged learners have reduced, constricted opportunities to construct new understandings with little chance to independently apply newly acquired knowledge.

PRINCIPLES OF LEARNING[1]

The Principles of Learning are condensed theoretical statements summarizing decades of learning research. The statements are linked to several explanatory points about particular features of each principle. Some of the features are further elaborated by a series of indicators that schools and classrooms are functioning in accord with the principle. They are designed to help educators analyze the quality of instruction and opportunities for learning that they offer to students.

Organizing for Effort

An effort-based school replaces the assumption that aptitude determines what and how much students learn with the assumption that sustained and directed effort can yield high achievement for all students. Everything is organized to evoke and support this effort, to send the message that effort is expected and that tough problems yield to sustained work. High minimum standards are set and assessments are geared to the standards. All students are taught a rigorous curriculum, matched to the standards, along with as much time and expert instruction as they need to meet or exceed expectations.

Clear Expectations

If we expect all students to achieve at high levels, then we need to define explicitly what we expect students to learn. These expectations need to be communicated clearly in ways that get them "into the heads" of school professionals, parents, the community and, above all, students themselves. Descriptive criteria and models of work that meet standards should be publicly displayed, and students should refer to these displays to help them analyze and discuss their work. With visible accomplishment targets to aim toward at each stage of learning, students can participate in evaluating their own work and setting goals for their own effort.

Fair and Credible Evaluations

If we expect students to put forth sustained effort over time, we need to use assessments that students find fair; and that parents, community, and employers find credible. Fair evaluations are ones that students can prepare for: therefore, tests, exams and classroom assessments—as well as the curriculum—must be aligned to the standards. Fair assessment also means grading against absolute standards rather than on a curve, so students can clearly see the results of their learning efforts. Assessments that meet these criteria provide parents, colleges, and employers with credible evaluations of what individual students know and can do.

Recognition of Accomplishment

If we expect students to put forth and sustain high levels of effort, we need to motivate them by regularly recognizing their accomplishments. Clear recognition of authentic

[1] The contents of this section belong to the Institute for Learning at the University of Pittsburgh.

accomplishment is a hallmark of an effort-based school. This recognition can take the form of celebrations of work that meets standards or intermediate progress benchmarks.

Academic Rigor in a Thinking Curriculum

Thinking and problem solving will be the "new basics" of the 21st century. But the common idea that we can teach thinking without a solid foundation of knowledge must be abandoned. So must the idea that we can teach knowledge without engaging students in thinking. Knowledge and thinking are intimately joined. This implies a curriculum organized around major concepts that students are expected to know deeply. Teaching must engage students in active reasoning about these concepts. In every subject, at every grade level, instruction and learning must include commitment to a knowledge core, high thinking demand, and active use of knowledge.

Accountable Talk℠

Talking with others about ideas and work is fundamental to learning. But not all talk sustains learning. For classroom talk to promote learning it must be accountable – to the learning community, to accurate and appropriate knowledge, and to rigorous thinking. Accountable talk seriously responds to and further develops what others in the group have said. It puts forth and demands knowledge that is accurate and relevant to the issue under discussion. Accountable talk uses evidence appropriate to the discipline (e.g., proofs in mathematics, data from investigations in science, textual details in literature, and documentary sources in history) and follows established norms of good reasoning. Teachers should intentionally create the norms and skills of accountable talk in their classrooms.

Socializing Intelligence

Intelligence is much more than an innate ability to think quickly and stockpile bits of knowledge. Intelligence is a set of problem-solving and reasoning capabilities along with the habits of mind that lead one to use those capabilities regularly. Intelligence is equally a set of beliefs about one's right and obligation to understand and make sense of the world, and one's capacity to figure things out over time. Intelligent habits of mind are learned through the daily expectations placed on the learner. By calling on students to use the skills of intelligent thinking—and by holding them responsible for doing so—educators can "teach" intelligence. This is what teachers normally do with students they expect much from; it should be standard practice with all students.

Self-management of Learning

If students are going to be responsible for the quality of their thinking and learning, they need to develop—and regularly use—an array of self-monitoring and self-management strategies. These metacognitive skills include noticing when one doesn't understand something and taking steps to remedy the situation, as well as formulating questions and inquiries that let one explore deep levels of meaning. Students also manage their own learning by evaluating the feedback they get from others; bringing their background knowledge to bear on new learning; anticipating learning difficulties and apportioning their time accordingly; and judging their progress toward a learning goal. These are strategies that good learners use

spontaneously and all students can learn through appropriate instruction and socialization. Learning environments should be designed to model and encourage the regular use of self-management strategies.

Learning as Apprenticeship

For many centuries most people learned by working alongside an expert who modeled skilled practice and guided novices as they created authentic products or performances for interested and critical audiences. This kind of apprenticeship allowed learners to acquire complex interdisciplinary knowledge, practical abilities, and appropriate forms of social behavior. Much of the power of apprenticeship learning can be brought into schooling by organizing learning environments so that complex thinking is modeled and analyzed, and by providing mentoring and coaching as students undertake extended projects and develop presentations of finished work, both in and beyond the classroom.

PRINCIPLES OF QUALITY GIFTED INSTRUCTION

Quality instruction in the gifted classroom must:

Differentiate, adapt or modify grade-level classroom curricula and instruction to meet the unique needs of gifted learners

Provide a means for demonstrating proficiency in required curriculum and provide subsequent challenging educational opportunities

Consist of a continuum of differentiated curricular options, instructional approaches and resource materials

Provide flexible instructional arrangements, i.e., compacting, acceleration, independent study and research projects

Be designed to broaden and deepen the learning of high-ability learners

Gifted Program Goals

- To provide mastery of basic skills of reading and the mathematics at a pace and depth appropriate to the capacity of able learners
- To promote critical thinking and reasoning abilities
- To provide an environment that encourages divergent thinking
- To foster inquiry and challenging attitudes toward learning
- To develop high-level oral and written skills
- To develop research skills and methods
- To develop an understanding for systems of knowledge, themes, issues and problems that frame the external world
- To develop self-understanding
- To facilitate opportunities for learning that are external to the school but provide an important match to the needs of learners
- To enhance opportunities for future planning and development
- To develop creative and divergent thinking skills
- To develop creative problem-solving skills
- To develop social skills of relating to others and coping effectively in social contexts
- To develop metacognitive skills that foster independent and self-directed learning

Source: Elissa Brown, PhD, Director, Center for Gifted Education, College of William & Mary

Gifted Education Programming Criterion: Curriculum and Instruction

Description: Gifted education services must include curricular and instructional opportunities directed to the unique needs of the gifted learner.

Guiding Principles	Minimum Standards	Exemplary Standards
1. Differentiated curriculum for the gifted learner must span grades pre-K–12.	1.0M Differentiated curriculum (curricular and instructional adaptations that address the unique learning needs of gifted learners) for gifted learners must be integrated and articulated throughout the district.	1.0E A well-defined and implemented curriculum scope and sequence should be articulated for all grade levels and all subject areas.
2. Regular classroom curricula and instruction must be adapted, modified, or replaced to meet the unique needs of gifted learners.	2.0M Instruction, objectives, and strategies provided to gifted learners must be systematically differentiated from those in the regular classroom. 2.1M Teachers must differentiate, replace, supplement, or modify curricula to facilitate higher level learning goals. 2.2M Means for demonstrating proficiency in essential regular curriculum concepts and processes must be established to facilitate appropriate academic acceleration. 2.3M Gifted learners must be assessed for proficiency in basic skills and knowledge and provided with alternative challenging educational opportunities when proficiency is demonstrated	2.0E District curriculum plans should include objectives, content, and resources that challenge gifted learners in the regular classroom. 2.1E Teachers should be responsible for developing plans to differentiate the curriculum in every discipline for gifted learners. 2.2E Documentation of instruction for assessing level(s) of learning and accelerated rates of learning should demonstrate plans for gifted learners based on specific needs of individual learners. 2.3E Gifted learners should be assessed for proficiency in all standard courses of study and subsequently provided with more challenging educational opportunities.
3. Instructional pace must be flexible to allow for the accelerated learning of gifted learners as appropriate.	3.0M A program of instruction must consist of advanced content and appropriately differentiated teaching strategies to reflect the accelerative learning pace and advanced intellectual processes of gifted learners.	3.0E When warranted, continual opportunities for curricular acceleration should be provided in gifted learners' areas of strength and interest while allowing a sufficient ceiling for optimal learning.
4. Educational opportunities for subject and grade skipping must be provided to gifted learners.	4.0M Decisions to proceed or limit the acceleration of content and grade acceleration must only be considered after a thorough assessment.	4.0E Possibilities for partial or full acceleration of content and grade levels should be available to any student presenting such needs.
5. Learning opportunities for gifted learners must consist of a continuum of differentiated curricular options, instructional approaches, and resource materials.	5.0M Diverse and appropriate learning experiences must consist of a variety of curricular options, instructional strategies, and materials. 5.1M Flexible instructional arrangements (e.g., special classes, seminars, resource rooms, mentorships, independent study, and research projects) must be available.	5.0E Appropriate service options for each student to work at assessed level(s) and advanced rates of learning should be available. 5.1E Differentiated educational program curricula for students pre-K–12 should be modified to provide learning experiences matched to students' interests, readiness, and learning styles.

CURRICULUM COMPACTING

Curriculum compacting is a procedure used to streamline the regular curriculum for students who are capable of mastering it at a faster pace.

The compacting process has three basic phases:

- Determine the goals and objectives of the regular curriculum
- Assess students for previous mastery of there objectives
- Substitute more appropriate (challenging) options

These components can be broken down into eight steps:

1. Identify the relevant learning objectives in a given subject area or grade level

2. Find or develop some means of pretesting students on one or more of these objectives prior to instruction

3. Identify students who may benefit from curriculum compacting and should be pretested

4. Pretest students to determine their mastery levels of the chosen objectives

5. Eliminate practice, drill or instructional time for students who have demonstrated prior mastery of these objectives

6. Streamline instruction of those objectives students have not mastered but are capable of mastering more quickly than their classmates

7. Offer enrichment of acceleration options for students whose curriculum has

8. Keep records of this process and the instructional options available to "compacted' students

Although enrichment and acceleration may be part of the process, compacting encompasses much more. It is, in fact, more closely associated with diagnosis and prescription: a method used in remedial education to point out learning objectives students have not yet mastered. Instruction is intended to help them "catch up" with the rest of the class. With compacting, pretesting identifies learning objectives already mastered, and students are allowed to 'test out" of certain academic exercises and move on to new material.

Source *Curriculum Compacting*, Reis, Burns and Renzulli p. 5 & 33, 1992

Classroom Options for Gifted Instruction

- Regular classroom differentiation
- Projects (Self-Direction)
- Compacting (Diagnostic/Prescriptive)
- Creative or Critical Thinking Skills
- Interdisciplinary/Multidisciplinary learning
- Affective curriculum
- Acceleration of content, process
- In-depth content options
- Extracurricular services

Issues in Grouping and Acceleration

Grouping

- Timeframes for grouping
- Subject Areas
- Teacher Qualifications
- Documentation of student growth
- Tailoring instruction
- Flexibility
- Type of Grouping most beneficial for student & district

Acceleration

- Consider the degree of giftedness and specific aptitude(s)
- Teacher qualifications
- Program articulation
- "Natural" transition points
- Non-intellective characteristics
- Flexibility

Source: Elissa Brown, PhD Director, Center for Gifted Education College of William & Mary

DIFFERENTIATION FEATURES

1. **Acceleration**
   - Fewer tasks assigned to master standard
   - Assessed earlier or prior to teaching
   - Clustered by higher order thinking skills

2. **Complexity**
   - Used multiple higher level skills
   - Added more variables to study
   - Required multiple resources

3. **Depth**
   - Studied a concept in multiple applications
   - Conducted original research
   - Developed a product

4. **Challenge**
   - Advanced resources employed
   - Sophisticated content used
   - Cross-disciplinary applications made
   - Reasoning made explicit

5. **Creativity**
   - Designed/constructed a model based on principles or criteria
   - Provided alternatives for tasks, products & assessments
   - Emphasized oral & written communication to real world audience

Source: Elissa Brown, PhD, Director, Center for Gifted Education, College of William & Mary

INQUIRY IN THE ELEMENTARY CLASSROOM

Knowledge does not easily pass from one source to another. We cannot "make" students understand. Students learn best when they look for and discover answers to their own questions; when they make their own connections and when inquiry is at the heart of learning.

Teacher's Role
The teacher is a mediator and facilitator for student learning. S/he may present a problem or question to students and ask questions such as: What can we find out about this topic? Why is it important? What impact has it had and why? What else do you need to know? S/he helps students think through strategies for investigations and ways to successfully monitor their own behavior. The teacher also helps students reflect on their work and processes.

Scaffold the Learning
Throughout a learning experience, the teacher must scaffold the learning for students. Mini-lessons are planned around student needs to help move them towards successful completion of a task or understanding of a concept. You cannot expect students to write a research report if you have not supported them with note-taking skills and strategies. Breaking tasks into manageable sub-skills (while keeping the context real and meaningful!) also helps students experience success.

Students' Role
Students should be active participants in their learning. They must take responsibility for their learning, ask questions for themselves, take initiative, and assess their own learning. They must demonstrate independence (from the teacher) and dependence on others (in group projects) when and where appropriate.

Assessment
Assessment is a tool for instruction. It should reflect what students know, not just what they don't know. Teachers need to utilize more than one method of assessment to determine what students know or have learned. Assessment measures can be formal and informal; tasks can be chosen by students and by teachers; speaking, writing, and other types of demonstrations of learning can be employed.

SOCIAL STUDIES SKILLS

Comprehension Skills

- making connections
- comparing and contrasting ideas
- identifying cause and effect
- drawing inferences and making conclusions
- paraphrasing; evaluating content
- distinguishing fact and opinion
- finding and solving multiple-step problems
- decision making
- handling/understanding different interpretations

Research and Writing Skills

- getting information; using various note-taking strategies
- organizing information
- identifying and using primary and secondary sources
- reading and understanding textbooks; looking for patterns
- interpreting information
- applying, analyzing and synthesizing information
- supporting a position with relevant facts and documents
- understanding importance
- creating a bibliography and webography

Interpersonal and Group Relation Skills

- defining terms; identifying basic assumptions
- identifying values conflicts
- recognizing and avoiding stereotypes
- recognizing different points of view; developing empathy and understanding
- participating in group planning and discussion
- cooperating to accomplish goals
- assuming responsibility for carrying out tasks

Sequencing and Chronology Skills

- using the vocabulary of time and chronology
- placing events in chronological order
- sequencing major events on a timeline; reading timelines
- creating timelines; researching time and chronology
- understanding the concepts of time, continuity, and change
- using sequence and order to plan and accomplish tasks

Map and Globe Skills

- reading maps, legends, symbols, and scales
- using a compass rose, grids, time zones; using mapping tools
- comparing maps and making inferences; understanding distance
- interpreting and analyzing different kinds of maps; creating maps

Graph and Image

- decoding images (graphs, cartoons, paintings, photographs)
- interpreting charts and graphs

Analysis Skills

- interpreting graphs and other images
- drawing conclusions and making predictions
- creating self-directed projects and participating in exhibitions
- presenting a persuasive argument

NEW RESEARCH ON CONTENT LITERACY AND ACADEMIC VOCABULARY

Reading and writing in the content areas require our students to have high-level literacy skills such as the capacity to make inferences from texts, synthesize information from a variety of sources, follow complex directions, question authenticity and understand content-specific and technical vocabulary.

Every academic discipline has its own set of literacy demands: the structures, organization and discourse that define the discipline. Students will not learn to read and write well in any content area unless they understand these demands. They need to be taught the specific demands of the discipline and to spend a significant amount of time reading, writing, and discussing with their peers and their teachers.

To truly have access to the language of an academic discipline means students need to become familiar with that discipline's essence of communication. We do not read a novel, a science text or social studies text in the same way or with the same purposes.

The role of knowledge and domain-specific vocabulary in reading comprehension has been well-researched, and we understand that students need opportunities to learn not only subject area concepts, but vocabulary also in order to have the ability to read the broad range of text types they are exposed to in reading social studies.

New research has shown that one factor in particular—**academic vocabulary**—is one of the strongest indicators of how well students will learn subject area content when they come to school. Teaching the specific terms of social studies, science, or math in a specific way is one of the strongest actions a teacher can take to ensure that students have the academic background knowledge they need to understand the social studies content they will encounter in school.

For more information:

Alliance for Excellent Education	Literacy Instruction in the Content Areas June 2007
Vacca and Vacca	Content Area Reading. Literacy and Learning across the Curriculum
Robert Marzano & Debra Pickering	Building Academic Vocabulary

SOCIAL STUDIES CONTENT AREA READING STRATEGIES

Content area literacy requires students to use language strategies to construct meaning from text. Specific reading strategies support students as they interact with text and retrieve, organize and interpret information.

Use Bloom's Taxonomy. From least to most complex, the competencies/thinking skills are knowledge, comprehension, application, analysis, synthesis, and evaluation. The taxonomy is useful when designing questions or student activities/projects.

Use "academic" vocabulary. An understanding of the academic language connected to a discipline is an important component of content comprehension. Students need this knowledge to function successfully. Short identified four types of vocabulary that social studies students regularly encounter: terms associated with instructional, or directional, tools ("north," "below,"); concrete terms ("Stamp Act"); conceptual terms ("democracy," "taxation"); and functional terms (such as a request to accurately "sequence" a group of events). According to Short, students should not only be made aware of these categories, they should be encouraged to employ examples from each type of vocabulary in classroom discussions.

Be aware of what SS texts demand of the reader. It is important to be cognizant of the specific demands that any given text will make on a reader. These demands can be to determine main ideas; locate and interpret significant details; understand sequences of events; make comparisons**;** comprehend cause-effect relationships**;** determine the meaning of context-dependent words**,** phrases, and statements; make generalizations; and analyze the author's voice and method.

Anticipate the main idea. Prior to beginning a reading assignment, ask students to skim the text and then think about what they anticipate the author's main idea or message to be. Encourage them to consider clues such as the text's title, paragraph headings, repetition of a particular name or term, and any related terms that might indicate the writer's focus. Review students' predictions, and plan to review again in the post-reading activities. Students can be made aware of which skim-reading clues proved helpful and which did not.

Make connections. Before reading it is helpful for students to ask themselves "What do I *think* I know about this topic?" Starting with the feeling of familiarity and context tends to make students more interested — and interactive — readers. Surveying what students think they already know about a topic may also have the benefit of exposing misunderstandings and biases.

Preview vocabulary. Give students a chance to preview a text's critical "academic terms." To preview academic vocabulary, you might utilize a *Wordsplash* followed by student discussion and then post words on the word wall.

Focus on questions. The best questions are those that students raise about the assigned topic. Students' own curiosity will encourage attentive reading. You can also prepare questions — a reading outline that is tailored to the reading material for less-skilled readers. These guides can be either content-oriented or skill oriented, but they will focus the reader. More advanced readers can find and paraphrase the main idea of a particular paragraph or text.

During Reading
During-reading strategies help students monitor their comprehension as they read. These should be directly related to the type of text with which students are interacting.

Encourage a Critical Lens Encourage students to discover the voice behind any printed material. Whether a textbook, an article, a primary document or eyewitness account, all texts are written by someone. Help students identify the publisher of the source or the writer to determine why the text was written, the audience for whom it was intended, and the purpose of the text. Aid students in making inferences as to the writer's target audience**.** This type of critical lens will help students develop critical reading skills and to recognize and select the best types of source for various research projects.

Identify the author's style. Some writers begin with an anecdote, then explain how it does (or does not) illustrate their topic. Others set the scene for re-visiting an historic event, then focus on its chronology. Journalists often compress key information within the opening paragraph**,** and then follow up with more details and/or with comments by experts. Invite students to speculate on what effect each approach might have on various audiences. Challenge students to try these styles in their own writing and reports.

Look for the Five W's. When working with newspaper articles have students identify the **Who What Where When** and **Why** of any major event reported by the writer.

Note comparisons/contrasts. Point out that writers use statements of contrast and comparison to signal that a comparison or contrast has been made and that it is significant.

Recognize cause-effect arguments. When historians, politicians, and economists explain causal relationships within their fields of expertise, they tend to use qualifying terms. Have students develop a list of the vocabulary that such writers use when making cause-effect arguments ("as one result," "partly on account of," "helps to explain why," etc.). Because of this need for qualification, you are framing questions in a specific way will allow students to sum up a cause-effect argument, without actually endorsing it**.** Example: "How does the author explain the causes of globalization?" But not: "What were the causes of globalization?"

Interpret sequence wisely. Related events that follow one another may be elements of a cause-effect relationship or they may not. When an author "chains" events using terms like “and then.... and then.... next.... finally....” remind students to look for additional verbal clues before deciding that this sequence of events demonstrates a true cause-effect relationship.

Post-Reading Review
Post-reading strategies help students review and synthesize what they've read:

Graphic Organizers. Students may often need assistance to grasp an author's basic argument or message. Graphic organizers — flowcharts, outlines, and other two-dimensional figures — can be very helpful**.**

Paraphrase. After students complete a reading assignment, ask them to paraphrase, in writing, or orally using three to five sentences. Review these summaries being sure to include references to: the

topic, the author's main idea, the most critical detail(s), and any key terms that give the argument its unique quality.

Time Order and Importance. When an author's argument depends upon a cluster of linked reasons and/or a series of logical points, readers can list the author's key points, and rank them in order of importance. When knowing the chronology of events in a particular text is important, students can list the 5 to 10 time-related events cited by the author.

True or False? Give students a list of 10 statements (true and false statements) related to the content of the text. Ask them to decide whether each statement is true or false, according to the author. Ask students to cite the particular part of the text on which they base their answer. This can also be adapted to help students discriminate between fact and opinion. Encourage students to preface their statements with the phrase 'according to the author.'

Key issues. After reading is a good time to encourage students to analyze and evaluate the author's argument on a theme or presentation of an issue in the social studies topic being studied. Students need time and guidance in order to evaluate an author's argument. This evaluation can spur additional reading and research as students will want to track down and read other sources/authors on the same topic**.**

Making Meaning. Becoming a critical reader and thinker involves acquiring a number of skills and strategies. What, can teachers do to help students comprehend the literal meaning and also read as an expert historian? One way to begin is with a Scavenger Hunt. The questions below offer some examples to guide students through a scavenger hunt of their social studies texts:

1. How many chapters/sections are in your text?
2. How is the book organized?
3. What type of information is placed at the beginning of the book, and why is this important?
4. What types of strategies or skills might a reader need to successfully read the books/texts?
5. While textbook chapters contain special features, trade books may not have the same features. What special features can you find in the book collections? Why might these features be important to your understanding the contents of the book?
6. How will the questions above help you better read the texts? Why?

Doty, Cameron, and Barton's (2003) research states that "teaching reading in social studies is not so much about teaching students basic reading skills as it is about teaching students how to use reading as a tool for thinking and learning."

Adapted from Reading Skills in the Social Studies, www.learningenrichment.org/reading.html

DIVERSITY AND MULTIPLE PERSPECTIVES: AN ESSENTIAL COMPONENT

Educators who are passionate about teaching history realize the importance of including multiple perspectives. The National Council for Social Studies (NCSS) and the New York State Department of Education stress the importance of the inclusion of multiple perspectives when teaching history. Research also shows us that comparing, contrasting, analyzing, and evaluating multiple perspectives helps all students become critical thinkers engaged in the learning process (Banks, 2000; Banks & Banks, 2004).

With all the demands and time constraints associated with content teaching it is easy to neglect some aspects, but the inclusion of multiple perspectives during the planning of curriculum and instructional experiences in social studies is very important and must be a core component of good social studies teaching and learning.

Examining history through multiple perspectives will increase students' ability to analyze and think critically. Looking at events and problems from different angles or perspectives engages students deeply as it provides them with a skill that is essential in a democratic society as diverse and complex as our own.

Teachers can help students develop multiple perspectives cultural sensitivity by modeling critical thinking skills and by using culturally diverse materials. Exposing students to multiple sources of information will cultivate an understanding and appreciation of diverse perspectives. Students will be exposed to learning that will require them to develop insight and awareness of the many perspectives involved in history making and analysis, important critical thinking skills to deal with conflicting pieces of information, the ability to detect and analyze bias, and an awareness of stereotyping. They will also experience first hand how new information can shape previously held beliefs and conclusions.

Using quality trade books that reflect a variety of views and perspectives on the same topics or events can help students develop *historical empathy* (Kohlmeier, 2005). All citizens of a democratic society who can display *historical empathy* are able to recognize and consider multiple perspectives, can distinguish significant from insignificant information and can critically evaluate the validity and merit of various sources of information.

When teaching topics in social studies, instead of relying on one definition or accepted sequence of events, encourage students to explore a broad range of understandings by asking important questions such as:

From whose perspective is this account given?

Could there be other perspectives or interpretations? Why might this be so?

Whose voices are heard? Whose voices are omitted?

What evidence is provided? How can we judge the quality of the evidence?

How are specific groups or individuals portrayed in this account? Why might this be so?

Why are there different versions of events and what impact does this have on our ideas of "truth" and historical accuracy?

Our goal in social studies is primarily to nurture democratic thinking and civic engagement; we can achieve this goal if we provide our students with the authentic voices of many peoples and the opportunity to explore alternate ways of perceiving the world.

"Powerful social studies teaching helps students develop social understanding and civic efficacy.… Civic efficacy—the readiness and willingness to assume citizenship responsibilities—is rooted in social studies knowledge and skills, along with related values (such as concern for the common good) and attitudes (such as an orientation toward participation in civic affairs). The nation depends on a well-informed and civic-minded citizenry to sustain its democratic traditions, especially now as it adjusts to its own heterogeneous society and its shifting roles in an increasingly interdependent and changing world." from NCSS.

INTERDISCIPLINARY MODELS: LITERACY AND SOCIAL STUDIES AS NATURAL PARTNERS

What is interdisciplinary curriculum?

An interdisciplinary curriculum can best be defined as the intentional application of methodology, practices, language, skills, and processes from more than one academic discipline. It is often planned around an exploration of an overarching theme, issue, topic, problem, question or concept. Interdisciplinary practices allow students to create connections between traditionally discrete disciplines or bodies of content knowledge/skills, thus enhancing their ability to interpret and apply previous learning to new, related learning experiences.

Planning for interdisciplinary units of study allows teachers to not only make important connections from one content or discipline to another, but also to acquire and apply understandings of concepts, strategies and skills that transcend specific curricula.

When teachers actively look for ways to integrate social studies and reading/writing content (when and where it makes the most sense), the pressure of not enough time in the school day to get all the content covered is reduced. Teachers should also think about hierarchy of content and make smart decisions as to what curricular content is worthy of immersion and knowing versus that which requires only exposure and familiarity (issues of breadth vs. depth).

With these thoughts in mind, teachers can begin to emphasize learning experiences that provide students with opportunities to make use of content and process skills useful in many disciplines.

"…activities designed around a unifying concept build on each other, rather than remaining as fragmented disciplines…. Creating a connection of ideas as well as of related skills provides opportunities for reinforcement. Additionally, sharp divisions among disciplines often create duplication of skills that is seldom generalized by our students. However… when concepts are developed over a period of time… young people are more likely to grasp the connections among ideas and to develop and understand broad generalizations." (*Social Studies at the Center. Integrating, Kids Content and Literacy,* Lindquist & Selwyn 2000)

Clearly this type of curricular organization and planning has easier applications for elementary schools where one teacher has the responsibility for most content instruction. Understanding that structures for this kind of work are not the standard in most middle schools, content teachers can still work and plan together regularly to support student learning and success.

For schools immersed in reading and writing workshop structures, there are many units of study that allow for seamless integration with social studies content.

For more information and research around integrated or interdisciplinary planning and teaching, see the work of:

Heidi Hayes Jacobs	*Interdisciplinary Design & Implementation*, and *Mapping the Big Picture: Integrating Curriculum and Assessment*
Robin Fogarty	*How to Integrate Curricula: The Mindful School*
David B. Ackerman	*Intellectual & Practical Criteria for Successful Curriculum Integration*
Davis N. Perkins	*Knowledge by Design*
Grant Wiggins & Jay McTighe	*Understanding by Design*
Carol Ann Tomlinson and Jay McTighe	*Integrating Differentiated Instruction & Understanding by Design*
Harvey Daniels & Steven Zemelman	*Subjects Matter: Every Teacher's Guide to Content Area Reading*
Stephanie Harvey	*Nonfiction Matters. Reading, Writing and Research in Grades 3-8*

PROJECT BASED LEARNING

Standards-focused project based learning is a systematic teaching method that engages students in learning knowledge and skills through an extended inquiry process structured around complex, authentic questions and carefully designed products and tasks.

- Project based learning makes content more meaningful, allowing students to dig more deeply into a topic and expand their interests.
- Effective project design engages students in complex, relevant problem solving. Students investigate, think, reflect, draft, and test hypotheses.
- Effective projects often involve cooperative learning. Developing strategies for learning and working with others to produce quality work is invaluable to students' lives.
- The process of learning how to select a worthwhile topic, research and present their findings is as important as the content of the project.
- Project based learning allows for a variety of learning styles. It supports the theory of multiple intelligences as students can present the results of their inquiry through a variety of products.
- Project based learning promotes personal responsibility, making decisions and choices about learning.
- Students learn to think critically and analytically. It supports students in moving through the levels of Bloom's taxonomy.
- Students are excited, engaged and enthusiastic about their learning.
- In-depth, meaningful research leads to higher retention of what is learned.

ENCOURAGING ACCOUNTABLE TALK IN CLASSROOM DISCUSSIONS

What is accountable talk?
Accountable talk is classroom conversation that has to do with what students are learning. We know that students love to talk, but we want to encourage students to talk about the ideas, concepts, and content that they encounter in school every day. Accountable talk can be whole class or small group in structure. A teacher may often get students started, but real accountable talk occurs with student ownership and minimal teacher input. The teacher may function as a facilitator initially, but as accountable talk becomes an integral part of the school day, students assume more responsibility for their own learning.

What does it look like?
Small groups of students are engaged in focused discussions around specific topics, questions, ideas or themes. Students are actively engaged and practicing good listening and speaking skills. Accountable talk is usually qualified by the use of appropriate rubrics.

What are rubrics?
Rubrics in accountable talk are scoring tools that list criteria for successful communication. Rubrics assist students with self-assessment and increase their responsibility for the task.

Sample Student Accountable Talk Rubrics
Have I actively participated in the discussion?
Have I listened attentively to all group members?
Did I elaborate and build on the ideas or comments of others?
Did I stay focused on the assigned topic?
Did I make connections to other learning?

Why is student discussion valuable?
Students' enthusiasm, involvement, and willingness to participate affect the quality of class discussion as an opportunity for learning. While it is a challenge is to engage all students it is important to provide daily opportunities for students to interact and talk to each other about the topic being learned as it helps them develop insights into the content. An atmosphere of rich discussion and student to student conversation will help you create a classroom in which students feel comfortable, secure, willing to take risks, and ready to test and share important content ideas and concepts.

Studies prove that students who have frequent opportunities for discussion achieve greater learning than those who do not. In fact, research maintains that students retain 10% of what they read, 20 % of what they hear, 30% of what they see, and **70%** of what they discuss with others.

Shared speaking helps learners gain information and it encourages more knowledgeable learners to be more sophisticated and articulate in sharing their knowledge. They then are careful about the words they use and the way they are presenting their ideas to their peers because they really want to be understood. When students listen to others and match it with the ideas that they are formulating, it can shed new light on their thinking. This type of speaking and active discussion may show the students a new way to connect to their learning.

Sometimes students can overlook important ideas, but with discussion (reciprocal) students have the opportunity to compare, analyze, synthesize, debate, investigate, clarify, question and engage in many types of high level and critical thinking.

ASSESSING STUDENT UNDERSTANDING

Assessment of student understanding is an ongoing process that begins with teachers establishing the goals and outcomes of a unit of study, and aligning assessment tools with those goals and outcomes. What teachers assess sends a strong message to their students about what content and skills are important for them to understand. Assessments evaluate student mastery of knowledge, cognitive processes, and skills, and provide a focus for daily instruction. Assessment is an integral part of the learning cycle, rather than the end of the process. It is a natural part of the curricular process, creates the framework for instruction, and establishes clear expectations for student learning.

The New York State Education Department ELA assessments are administered in January in 3rd, 4th and 5th grades. These exams measure the progress students are making in achieving the learning standards. New York City also conducts periodic assessments throughout the year in grades three and up, which can be analyzed by teachers for individual student and class needs. Teachers should consult the school's inquiry team recommendations as well as use information from other school assessments to strategically plan instruction in areas where students need assistance to reach mastery.

The International Reading Association has adopted 11 standards for assessment:

1. The interests of the student are paramount.
2. The primary purpose of assessment is to improve teaching and learning.
3. Assessment must reflect and allow for critical inquiry into curriculum and instruction
4. Assessments must recognize and reflect the intellectually and socially complex nature of reading and writing….
5. Assessment must be fair and equitable.
6. The consequences of an assessment procedure are the first and most important consideration in establishing the validity of the assessment.
7. The teacher is the most important agent of assessment.
8. The assessment process should involve multiple perspectives and sources of data.
9. Assessment must be based in the school community.
10. All members of the educational community…must have a voice in the development, interpretation, and reporting of assessment.
11. Parents must be involved as active, essential participants in the assessment process.

Effective assessment plans incorporate every goal or outcome of the unit. Content knowledge and skills need to be broken down – unpacked-- and laid out in a series of specific statements of what students need to understand and be able to do. The teaching of content and skills is reflected in the daily lesson plans. Assessment should not be viewed as separate from instruction. Student evaluation is most authentic when it is based upon the ideas, processes, products, and behaviors exhibited during regular instruction. Students should have a clear understanding of what is ahead, what is expected, and how evaluation will occur. Expected outcomes of instruction should be specified and criteria for evaluating degrees of success clearly outlined.

When developing an assessment plan, a balance and range of tools is essential. Teachers should include assessments that are process- as well as product-oriented. Multiple performance indicators provide students with different strengths equal opportunity to demonstrate their understanding. Multiple indicators also allow teachers to assess whether their instructional program is meeting the needs of the students, and to make adjustments as necessary.

An effective assessment plan includes both *formative* assessments – assessments that allow teachers to give feedback as the project progresses – and *summative* assessments – assessments that provide students with a culminating evaluation of their understanding. Teachers should also plan assessments that provide opportunities for students to explore content in depth, to demonstrate higher order thinking skills, and relate their understanding to their experiences. Additionally, evidence of student thinking allows teachers to assess both skills and affective outcomes on an on-going basis. Examples of student products and the variety of assessments possible follow.

Sample of student projects	Sample assessment tools
• exit projects • student-made maps and models • student-made artifacts • mock debates • class museums and exhibitions • student peer evaluation • student-made books • I-movies; photo-essays • graphic timelines • creating songs and plays • writing historical fiction and/or diary entries • creating maps and dioramas • student-created walking tours • tables, charts and/or diagrams that represent data • student-made PowerPoints, webquests • monologues	• higher level analytical thinking activities • portfolios of student work • student criteria setting and self-evaluation • teacher observations • conferences with individuals or groups • group discussions • anecdotal records • teacher-made tests • student presentations • role play and simulations • completed "trips sheets" • rubrics for student exhibitions • rubrics and checklists • reflective journal entries • student writing (narrative procedures, etc.) • video and/or audio tapes of student work • student work

MULTIPLE INTELLIGENCES

Students learn and respond to information in many different ways. Teachers should consider the strengths and learning styles of their students and try to provide all students with a variety of opportunities to demonstrate their learning.

Intelligence	**Learning preferences**
Verbal-Linguistic "word smart"	Students who demonstrate a mastery of language and strength in the language arts – speaking, writing, reading, listening.
Logical- Mathematical "number-smart"	Students who display an aptitude for numbers, detecting patterns, thinking logically, reasoning, and problem-solving.
Body-Kinesthetic "body-smart"	Students who use the body to express their ideas and feelings, and learn best through physical activity – games, movement, hands-on tasks, dancing, building.
Visual-Spatial "picture-smart"	Students who learn best visually by organizing things spatially, creating and manipulating mental images to solve problems.
Naturalistic "nature smart"	Students who love the outdoors, animals, plants, field trips, and natures in general and have the ability to identify and classify patterns in nature.
Musical-Rhythmic "music-smart"	Students who are sensitive to rhythm, pitch, melody, and tone of music and learn through songs, patterns, rhythms, instruments and musical expression.
Interpersonal "people-smart"	Students who are sensitive to other people, noticeably people oriented and outgoing, learn cooperatively in groups or with a partner.
Intrapersonal "self-smart"	Students who are especially in touch with their own desires, feelings, moods, motivations, values, and ideas and learn best by reflection or by themselves.

The contents of this section are based on the Multiple Intelligences work of Howard Gardner.

BLOOM'S TAXONOMY

The language of Bloom's Taxonomy was revised by his student Lorin Anderson in 2001. Anderson updated the taxonomy by using verbs to describe cognitive processes and created a framework for levels of knowledge as well. The cognitive processes are presented in a continuum of cognitive complexity (from simplest to most complex). The knowledge dimensions (factual, conceptual, procedural, and metacognitive) are structured according to a continuum that moves from the concrete to the abstract. The taxonomy can help teachers understand how learning objectives that are identified for students relate to the associated cognitive processes and levels of knowledge. Using the taxonomy will also highlight the levels at which teachers spend the greatest amount of teaching time and where they might consider increasing or decreasing emphasis.

THE KNOWLEDGE DIMENSION	**THE COGNITIVE PROCESS DIMENSION** ← →					
	1. REMEMBER	**2. UNDERSTAND**	**3. APPLY**	**4. ANALYZE**	**5. EVALUATE**	**6. CREATE**
A. Factual Knowledge ↑ **B. Conceptual Knowledge** **C. Procedural Knowledge** **D. Metacognitive Knowledge** ↓	Retrieve relevant knowledge from long-term memory • Recognize (identify) • Recall (retrieve)	Construct meaning from instructional messages, including oral, written, and graphic information • Interpret (clarify, paraphrase, represent, translate) • Exemplify (illustrate, give examples) • Classify (categorize, subsume) • Summarize (abstract, generalize) • Infer (conclude, extrapolate, interpolate, predict) • Compare (contrast, map, match) • Explain (construct models)	Carry out or use a procedure in a given situation • Execute (carry out) • Implement (use)	Break material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose • Differentiate (discriminate, distinguish, focus, select) • Organize (find coherence, integrate, outline, parse, structure) • Attribute (deconstruct)	Make judgments based on criteria and standards • Check (coordinate, detect, monitor, test) • Critique • (judge)	Put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure • Generate (hypothesize) • Plan (design) • Produce (construct)

MAXIMIZING FIELD TRIP POTENTIAL

Field trips are a great way to bring excitement and adventure to learning. As a direct extension of classroom instruction, they are an important component of standards based instruction. Field trip experiences provide structured flexibility for students to deeply explore areas of interest in their own way, discovering information that can be shared with others. A focused, well-planned trip can introduce new skills and concepts to students, and reinforce ongoing lessons. Museums and community resources offer exposure to hands-on experiences, real artifacts, and original sources. Students can apply what they are learning in the classroom, making material less abstract.

The key to planning a successful field trip is to make connections between the trip and your curriculum, learning goals and other projects. Field trips are fun, but they should reinforce educational goals. Discuss the purpose of the field trip and how it relates to the unit of study. Trips need to be integrated into the big picture so that their lessons aren't lost.

Begin by identifying the rationale, objectives and plan of evaluation for the trip.

- Be sure to become familiar with the location before the trip. Explore the exhibition(s) you plan to visit to get ideas for pre field trip activities.
- Orient your students to the setting and clarify learning objectives. Reading books related to the topic or place, as well as exploring the website of the location are some of the ways you can introduce the trip to your class.
- Plan pre-visit activities aligned with curriculum goals
- Discuss with students how to ask good questions and brainstorm a list of open-ended observation questions to gather information during the visit.
- Consider using the trip as the basis for an inquiry-based project. The projects can be undertaken as a full group or in teams or pairs.
- Plan activities that support the curriculum and also take advantage of the uniqueness of the setting
- Allow students time to explore and discover during the visit
- Plan post-visit classroom activities that reinforce the experience

Well-designed field trips result in higher student academic performance, provide experiences that support a variety of learning styles and intelligences, and allow teachers to learn alongside their students as they closely observe their learning strengths. Avoid the practice of using the field trip as a reward students must earn. Field trips are an essential part of an important planned learning experience.

USING A TRIP BOARD

Many teachers utilize trip boards to help their students focus while on a class trip. Trip boards are teacher-created activity sheets that are stapled to a stiff piece of cardboard or clipped to a clipboard, and that children take along and fill out on the trip. The trip board helps direct the children to pay attention to certain features of the trip, whether cases in a museum exhibit, artifacts, or outdoor sights. When constructing the trip board, consider some open-ended questions for the students to answer as well as some that are more directed, such as, " In the case marked A1, look for objects that relate to our trip theme. List what you find and include at least two questions that you have." Other ideas for trip boards include:

- How are these two objects different from one another?
- How do these objects relate to each other?
- Write a paragraph about this artifact under your sketch.
- Pretend you are a character in this exhibit. Describe as much as you can about your life.
- What does this artifact tell about the owner's life?

Also try to include one or more opportunities for sketching by the students. Some teachers include a top sheet that has a checklist to work on while traveling by bus or subway, such as how many taxis you see, or how many passengers are reading on the train.

NYCDOE SOCIAL STUDIES SCOPE AND SEQUENCE

Grade	Units of Study					
K	School and School Community	Self and Others	Families	The Neighborhood		
First	Families are Important	Families, Now and Long Ago	Families in Communities	The Community		
Second	Our Community's Geography	New York City Over Time	Urban, Suburban and Rural Communities	Rights, Rules and Responsibilities		
Third	Introduction to World Geography and World Communities		Case Study of a Community in Africa, Asia, South America, The Caribbean, Middle East, Europe, Southeast Asia, or Australia *Teacher should select 3-6 world communities to study that reflect diverse regions of the world*			
Fourth	Native Americans: First Inhabitants of NYS	Three Worlds Meet	Colonial and Revolutionary Periods	The New Nation	Growth and Expansion	Local and State Government
Fifth	Geography and Early Peoples of the Western Hemisphere	The United States	Latin America	Canada	Western Hemisphere Today	
Sixth	Geography and Early Peoples of the Eastern Hemisphere	Middle East	Africa	Asia	Europe	
Seventh	Early Encounters: Native Americans and Explorers	Colonial America and the American Revolution	A New Nation	America Grows	Civil War and Reconstruction	
Eighth	An Industrial Society	The Progressive Movement	The United States as an Expansionist Nation	The United States between Wars	The United States Assumes Worldwide Responsibilities	From World War II to the Present: The Changing Nature of the American People
Ninth	Ancient World-Civilizations & Religions	Expanding Zones of Exchange and Encounter	Global Interactions (1200-1650)	The First Global Age (1450-1770)		
Tenth	An Age of Revolution (1750-1914)	Crisis and Achievement Including World Wars (1900-1945)	The 20th Century Since 1945	Global Connections and Interactions		
Eleventh	Forming a Union	Civil War and Reconstruction	Industrialization, Urbanization and the Progressive Movement	Prosperity and Depression: At Home and Abroad (1917-1940)	Triumphs and Challenges in American Democracy (1950-present)	
Twelfth	Economics and Economic Decision Making		Participation in Government			

LEARNING AND PERFORMANCE STANDARDS

NYS Social Studies Learning Standards	NYC Performance Standards in ELA	Sample List of Strategies That Social Studies and ELA Have In Common
• History of the United States and New York 1.2a, 1.3b,1.4b,1.4c • Geography 3.1a, 3.1b, 3.1c, 3.1d, 3.13, 3.2a, 3.2b, 3.2c • Civics, Citizenship and Government 5.2f, 5.4a	• E1- Reading • E2-Writing • E3-Speaking, Listening and Viewing • E4- Conventions, Grammar and Usage of the English Language • E5- Literature • E6- Public Documents • E7- Functional Documents	What specific Social Studies strategies will this unit focus on? • Analyzing and creating maps, charts, diagrams, graphic organizers • Reading for information • Listening for information • Presenting information clearly in a variety of forms- oral, written and project based • Gather and interpret information from reference books, magazines, websites, oral interviews, maps, charts, graphs, photographs, songs, diagrams, etc. • Select and use information/resources appropriate to each task/activity
What specific Social Studies content will this unit focus on? Use research through fiction/nonfiction texts, interviews, fieldtrips and websites to produce a variety of pieces such as brochures, letters, short stories, poems/songs, and create related projects.	What specific literacy skills will this unit focus on? • Reading and comprehending fiction, nonfiction, and historical fiction. • Writing brochures, letters, short stories, poems/songs, postcards • Demonstrate note taking skills	

Unit Overview for Teacher Background

Egypt (officially the Arab Republic of Egypt) lies on the continent of Africa, but the easternmost portion of Egypt, the Sinai Peninsula, is usually considered part of Asia; it forms the only land bridge between the two continents.

Most of Egypt's terrain is desert, divided into two unequal parts by the Nile River. The valley and delta of the Nile are the main centers of habitation. The capital and largest city is Cairo.
The Nile River, which formed the focus of ancient Egyptian civilization, originates in the highlands of East Africa and flows northward throughout the length of what are now Sudan and Egypt. Northwest of modern-day Cairo, it branches out to form a broad delta, through which it empties into the Mediterranean Sea. Because of seasonal rains farther south in Africa, the Nile overflowed its banks in Egypt every year. When the floodwaters receded, a rich black soil covered the floodplain. This natural phenomenon and its effects on the environment enabled the ancient Egyptians to develop a successful economy based on agriculture.

Other natural factors combined to give rise to a great civilization in the Nile region. In Egypt's relatively cloudless sky the sun almost always shone, consistently providing heat and light. The Nile served as a water highway for the people, a constant source of life-giving water, and sustained plants and animals. In addition, natural barriers provided good protection from other peoples. The desert to the west, the seas to the north and east, and the Nile's rapids, or cataracts, to the south prevented frequent hostile attacks.

In this setting, a sophisticated and creative society came into being. That society was the only one in the area to endure for thousands of years. Each of its rivals rose to power, but ultimately faded from importance. It is in this land that two of the Seven Wonders of the World are found: The pyramids at Giza and the lighthouse at Alexandria. The ancient Egyptians produced a vast body of written records, including ethical and moralistic treatises, instructional texts, religious and magical scrolls, and epic stories. They possessed a sophisticated understanding of mathematics and the principles of architecture, enabling them to introduce to the world large stone buildings before 2500 B.C. Their sculptures, paintings, and drawings captivate viewers even today.

Although present-day Egypt is an overwhelmingly Arabic-speaking and Islamic country, it retains important aspects of its past Christian, Greco-Roman, and ancient indigenous heritage.

*"Egypt," Microsoft® Encarta® Online Encyclopedia 2008
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 "Ancient Egypt," Microsoft® Encarta® Online Encyclopedia 2008
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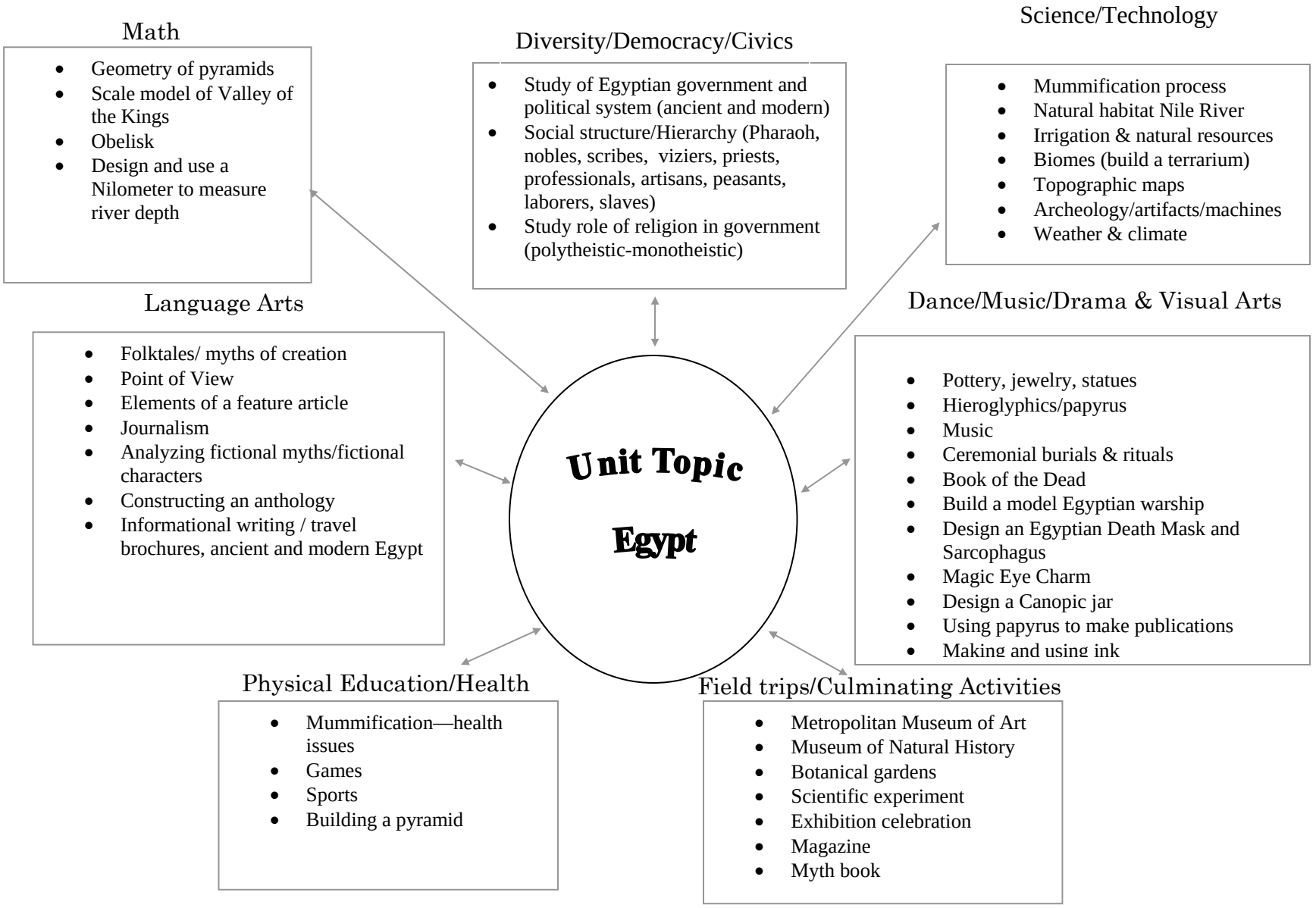
Goals and Outcomes

As part of the New York State social studies curriculum, sixth grade students focus on world history and the development of ancient civilizations. In this unit designed for teacher collaboration, students will investigate the role geography has played in the development of Egyptian society throughout history. The individual lessons in this unit will challenge students to think critically and creatively. Within the lessons there are opportunities for students to choose activities that are tailored to individual learning styles and enrichment activities for those working at a faster pace than the rest of a given class. Teachers will find that this unit of study can be adapted for various grade levels and can be used collaboratively with other teachers or independently. At the culmination of this six week unit, students should understand that modern mathematics, sciences, architecture and writing have developed out of the work of ancient societies such as Egypt. They should also recognize the importance of modern Egypt as a cultural, economic and political bridge between the Middle East and Africa.


Unit Topic
Egypt
Math
Geometry of pyramids
Scale model of Valley of the Kings
Obelisk
Design and use a Nilometer to measure river depth
Diversity/Democracy/Civics
Study of Egyptian government and political system (ancient and modern)
Social structure/Hierarchy (Pharaoh, nobles, scribes, viziers, priests, professionals, artisans, peasants, laborers, slaves)
Study role of religion in government (polytheistic-monotheistic)
Science/Technology
Mummification process
Natural habitat Nile River
Irrigation & natural resources
Biomes (build a terrarium)
Topographic maps
Archeology/artifacts/machines
Weather & climate
Language Arts
Folktales/ myths of creation
Point of View
Elements of a feature article
Journalism
Analyzing fictional myths/fictional characters
Constructing an anthology
Informational writing / travel brochures, ancient and modern Egypt
Dance/Music/Drama & Visual Arts
Pottery, jewelry, statues
Hieroglyphics/papyrus
Music
Ceremonial burials & rituals
Book of the Dead
Build a model Egyptian warship
Design an Egyptian Death Mask and Sarcophagus
Magic Eye Charm
Design a Canopic jar
Using papyrus to make publications
Making and using ink
Physical Education/Health
Mummification—health issues
Games
Sports
Building a pyramid
Field trips/Culminating Activities
Metropolitan Museum of Art
Museum of Natural History
Botanical gardens
Scientific experiment
Exhibition celebration
Magazine
Myth book

Essential Question

How does geography influence the development of a civilization?

Focus Questions

- How do natural resources affect the development of a society?
- Throughout history, how have people used technology to adapt to their natural environment?
- What is the purpose of preservation / mummification?
- How does climate change affect people over time?
- How does religion influence the development of a government?
- What role do myths and folktales serve in societies?

Student Outcomes

Think about what you want the student to know and be able to do by the end of this unit.

Content	Process	Skills
• Egyptian History: Past to Present • Geography, Religion, Politics, Science, Art, Literature, Architecture, Technology • Mythology • Current Events	• How to create a publication • Create a timeline and maps • Experiment with various forms of human preservation • Study the elements of Egyptian art / music • Learn the archetypal structures of myths	• Understanding maps and keys • Analyzing documents • Compare and Contrast • Mythical structures and archetypes in writing • Writing a scientific hypothesis • Scientific preservation

Possible student projects/products: Students write their own creation or hero myths, Mummification experiments (lab), Student produced magazines focused on ancient and modern Egypt, Graphic novels

Unit of Study: Egypt
Essential Question: How does geography influence the development of a civilization?

Focus Questions	Disciplines	I. Initial activities that introduce, build and engage students with content knowledge, concept, skill	II. Extension activities that challenge students to deepen their understanding through inquiry and application, analysis, synthesis, of knowledge, concept, skill	III. Culminating activities for independent or small group investigations that allow students to create, share or extend knowledge through encouragement of student interests	Resources Needed
• How do natural resources affect the development of a society? • Throughout history, how have people used technology to adapt to their natural environment? • What is the purpose of mummifica-tion? • How does climate change affect people over time? • How does religion influence the development of a government? • What role do	Literacy	• Listen to and read Egyptian myths • List new vocabulary words • Read about mythological archetypes • Identify the themes of Egyptian myths • Readings on modern Egypt from a variety of genres and perspectives: Bedouin stories, Magazine articles, anthropological studies, poems etc. • Guest speaker • Trip to see a mythological play	• Students rewrite one of the Egyptian myths we read in class as a script w/ stage directions and perform the script in class. • Write their own creation or hero myths based on the structure / archetypes we studied in class. • Read hero or creation myths from at least four different cultures then write an essay illustrating how the stories compare and contrast. • Compare and contrast the role women play in Egyptian folktales with the real stories of modern Bedouin women living in Egypt.	• Students modernize a myth, write it as a script and perform it outside of school on DVD. A film festival will celebrate students' work. • Illustrate and bind their mythic stories into a class anthology. • Research how the mythological hero archetype has been used to create Hollywood movies. Students teach the class using movie clips and critical thinking questions they generate as a group. • Write and perform a play that illustrates a day in the life of a modern Bedouin woman.	• Tales of Ancient Egypt by Charles Mozley • Ancient Egypt: Read Aloud Plays by John Rearick • Writing Women's Worlds: Bedouin Stories by Lila Abu-Lughod • The Hero with a Thousand Faces by Joseph Campbell Websites www.history.com www.blogger.com www.wordpress.com www.neferchichi.com www.mfa.org/egypt www.ancientegypt.co.uk www.dsc.discovery.com www.rom.on.ca/egypt http://orias.berkeley.edu/hero/JourneyStages.pdf www.metmuseum.org

myths and folktales serve in societies? • What are the current critical issues in Egypt? Content: The student will: • Understand the political, social, geographic and economic development of Egyptian culture. • Study the impact ancient Egypt has had on the modern world. • Study the food, art, music, and culture of ancient and modern Egypt. • Understand	Math/ Science	• Study topographic maps • Introduce the concept of biomes and/or simple machines • Trip to a local zoo and museum • View graphs and charts that illustrate climatic change in Egypt	• Analyze and interpret how climatic factors affect a civilization • Compare and contrast biomes • Investigate the health and environmental issues of mummification / preservation • Construct a topographic map • Differentiate simple machines and their advantages	• Develop and display an investigatory project on mummification • Build a desert terrarium • Build a model of machines used by Egyptians to build pyramids or to adapt to their environment	
	Social Studies	• Develop a KWL Chart • Observe art and artifacts that depict the daily life of Egyptians • Study maps on the different regions of Egypt • Trip to the Metropolitan Museum of Art • Study of the dollar bill. Why are there pyramids on it?	• Dioramas of Egypt's geographical regions. • Analyze religious artifacts • Interpret the mummification process. • Design their own eye charm • Develop a map that represents Egyptian tombs and temples • Compare and contrast Egypt past and present • Organize a chart of the Egyptian social structure/ government	• Develop a magazine comparing and contrasting Egyptian culture through time. • Travel Brochures for regions of Egypt • Design their own banquet which would include Egyptian food, dress and art/decoration	

the importance and process of mummi-fication. • Understand the significance of the Nile River on the development of Egyptian society. • Gain an un-derstanding of Egypt's technology. • Read Egyptian myths and understand archetypal structure. • Understand the critical issues of modern Egypt. Process: The student will: • Create a timeline and topographic					
	The Arts	• Observe architectural landmarks (pyramids, sphinx, obelisk, temples, and tombs) • View art work from Egypt • Listen to Egyptian Music • Belly dance performance • Henna artist—class demonstration	• Design a replica of an Egyptian artifact • Compare and contrast past and present Egyptian art • Utilize the Rosetta Stone to write their names in hieroglyphics • Make their own papyrus paper • Make their own Henna body art and Egyptian style jewelry • Study various styles of Egyptian dance • Study Egyptian rhythmic structures and instruments	• Perform a burial ceremony using the spells from the book of the dead • Develop an Egyptian museum exhibition using student created artifacts • Wall painting of daily life in Egypt • Egyptian music and dance concert	
	Techno-logy	• View video clips from the History Channel to learn about the structure of documentary films • Use	• Develop a file of digital photographs on Egyptian art, artifacts, and architecture • Learn how to manipulate Blog templates, widgets and hyperlinks • Learn how to use a	• Create a video documentary on a topic related to modern Egypt • Create a Power Point exhibit of photos and text • Use a blog to post original myths and feedback to	

maps. • Experiment with preservation / mummifica-tion. • Create a nonfiction publication focused on modern Egypt. • Use knowledge of archetypal structure to write their own myths. • Build a desert terrarium. • Build dioramas of Egypt's various geographical regions. Attitudes and Attributes: The student will: • Gain an understand-ing of how		photography to capture examples of Egyptian art and architecture in New York City • Locate primary sources on the internet • Study the structure and design of blogs	digital video camera and Moviemaker software for editing	classmates	

Egyptian culture has influenced the development of other societies in the world. • Appreciate the role geography plays in the development of societies. • Acknowledge the impact of mythological archetypes on modern story-telling.					

Social Studies Weekly Planner

Essential Question: How does geography influence the development of a civilization?

	Focus Questions	Activities	Skills/Vocabulary	Source Materials	Student Assessment
Week One	How do artifacts found by archeologists help us better understand ancient Egypt? Is Egypt on the continent of Africa? What are the geographical features of Egypt? What civilization developed along the Nile River? How are dates on a timeline organized?	• Provide students with travel advertisements of Egypt, then make a list of important landmarks in Egypt. • Develop maps of the region and geographical features • Timeline-Students would develop a life size timeline model. Incorporate facts, visuals, sources, and other information into the timeline on a daily basis.	Note taking Using maps Distinguishing between AD & BC Researching the internet <u>Vocabulary Words</u> Archeologist Artifacts Carbon 14 dating Nile River Sahara Dessert Delta Cataract Irrigation Mediterranean Sea Oasis Lower and upper Egypt Kemet Shaduf <u>Ancient Egyptian Chronology:</u> Old Kingdom Middle Kingdom New Kingdom Ptolemaic period	Maps of Egypt (Luxor, Valley of the Kings, Karnak, Abu Simbel, Saqqara, Thebes & Obelisk) Visuals of landmarks Internet, textbook, atlas, and magazines Travel advertisements on Egypt Timeline Template Social Studies textbook	Develop their own maps of Egypt and include their geographical features Develop a Timeline Homework Bring in different examples of Egyptian culture to add to the Timeline. Develop an Egyptian Scrap book. Create a crossroad puzzle using Egyptian vocabulary words.

Week Two	How do natural resources affect the development of a society? What natural resources were used to develop Egyptian architecture? What can we learn from them? (lesson plan included) Throughout history, how have people used technology to adapt to their natural environment? How do we know about the culture of the ancient Egyptians? Why is a written language imperative to learning about a culture?	Show video on the animals and plants that were native to northern Africa • Analysis of how the Nile River, desert, weather, and other natural resources influence Egyptian society • Investigation of Egyptian architecture (pyramids), jewelry, papyrus, and other artifacts which are made out of resources found in their natural surroundings. • Discussion of the importance of writing Hieroglyphics/Rosetta Stone • Visit to the Botanical Gardens and Museum of Natural History. (scavenger hunt) • Trip to the Metropolitan Museum of Art. • Student are organized into groups and begin gathering information for their travel brochure or website	Analyze Primary Sources Identify primary and secondary sources Egyptian artifacts (murals, pottery, structures and other primary sources) <u>Vocabulary Word</u> Nilometer Quern Mattox Flail Shadoof Domestication of animals Papyrus	Visuals of Egypt's natural surroundings and architectural structures Internet Social Studies Textbook	Homework Write about the importance of these animals to Egyptian survival. Did the natural resources of Africa contribute to the development of Egyptian culture? Incorporate more facts and sources into the timeline. Make a post card about the natural surroundings of Egypt.

	Focus Questions	Activities	Source Materials		Student Assessment
Week Three	Did the social structure of Egyptian society contribute to their prosperity? Why were social structures important to the prosperity of Egyptian civilization? What role did religion play in the development of their culture? What are the rituals of the mummification? How did religion influence the development of their government?	Visuals artifacts of everyday life of Egyptians • Research their social structure and occupations Religion/polytheistic • Students are given a collection of gods and must match them with their animal form. • Analyze and chart the special attributes of the gods: Isis, Osiris, Horus, Sobek, Thoth, Khum and Anubis • Write their own spell • Begin working on their travel brochures and review the brochure rubric.	Analyzing primary sources (visuals and documents) Element of a Brochure/Outline/organization <u>Vocabulary Words</u> Egyptian Social Structure Pharaoh Vizier Priest Slaves Monarch Polytheistic (Osiris, Isis, Ra and Anubis) Dynasty Canopic jar Amulet Tomb Sarcophagus Mummy Mummification Dehydration Preservation	Erman, Adolf. Life in Ancient Egypt. Dover publication, Inc., 1997 Visuals of Egyptian daily life Pyramid social structure template Excerpts from the book of the dead Social Studies Textbook	Homework Select a favorite god and write about their importance/contribution to Egyptian society. Design a mask of an Egyptian god and a summary about their super natural powers. Incorporate more information into the timeline. Vocabulary Quiz Find an article relating to Egypt today.

Week Four	How has Egyptian society changed through time? How has the role of the Nile River changed? What elements of ancient Egypt are still apparent in society today?	Group Discussion on Egypt today Share their findings about: Egyptian society today. • Venn diagram of Egypt's past and present (geography/maps, technology, religion, government, language, culture) • Debate Which civilization was better developed and why? Which one would be classified as the authentic "Egyptian culture"? Why do we need religion? Why is religion important to people? Should religion be a form of government? • In groups, students are provided with sample brochures and gather current event information about Egypt.	Developing an argument Persuasion Asking questions <u>Vocabulary Words</u> Religion Monotheistic Caliph Muslim/Islamic Christian Orthodox Egyptian Jews Arabic Republic/Government	Newspaper Articles from Egypt or the Middle East Textbooks and Internet	

	Focus Questions	Activities	Skills/Vocabulary	Source Materials	Student Assessment
Week Five	Does one nation have the right to invade and colonize another? What effect has colonialism had on Egyptian society? What are the current critical issues in Egypt today? How does religion influence the role of women in society?	• Using the timeline, students integrate other important events that contributed to the development of Egyptian culture. • Socratic seminar on its role in today's society. What roles do women play in Egyptian society? What role does Egypt have in the middle east? What are some difficulties that this nation faces in today's society? • Students work on Travel Brochures	Construct Charts/Tables Interpret Political cartoons (current events) Distinguishing between fact and opinion <u>Vocabulary/terms Words</u> Ottoman Empire occupation French occupation British occupation Colony Colonialism Invade Conquest	Textbook Internet Sites	Travel brochure/website Homework Vocabulary quiz Design their own political cartoon which would include a social commentary. Write their own discussion questions.

					Travel Brochure/website Egyptian Festival
Week Six	How have cultural exchanges contributed to the diversity of Egyptian society? What affect has multiculturalism had on Egyptian way of life? What is Egypt's role in the world today?	• Scavenger hunt of Egyptian traditions that are based on another society. • Investigation of cultural groups living in Egypt. • Presentation of Travel Brochure	Identify issues and/or problems and alternative solutions Summarizing <u>Vocabulary Words</u> Multiculturalism Diversity Feminism Equality Religious fanatics	Textbook Internet Site	

Unit: Egypt English Language Arts Planning Sheet

	Focus Questions	Reading / Writing Mini Lessons	Activities	Source Materials	Student Assessment
Week One	What is a myth? What role do myths and folktales serve in societies?	What does the myth of Isis and Osiris explain about the world and human nature? What is the purpose of this myth? Why were creation myths such an important part of primitive societies? How can you use annotation to better understand a piece of writing? How do you write a help wanted ad?	• Elements of mythology—pretest • Read the myth of Isis and Osiris • Fishbowl discussion • Help wanted ad for a god or goddess • Perform the myth of Isis and Osiris in class • Annotate the myth of Isis and Osiris. Focus on style and structure • Vocabulary—crossword puzzle, synonyms and antonyms	<u>Tales of Ancient Egypt</u> by Charles Mozley <u>Ancient Egypt: Read Aloud Plays</u> by John Rearick	• Vocabulary quiz • Critical thinking questions • Help Wanted Ad for a god or goddess Homework Compare and contrast the myth of Isis and Osiris to 3 other creation myths from around the world. What commonalities do you see in these stories? Why do you suppose these stories were written? How do the stories connect to each culture's natural environment?

Week Two	What is a mythological archetype? Where do archetypes originate? What is a hero?	What does Joseph Campbell describe as the stages of the hero archetype? How can you identify the archetypal stages within a story or movie? What is a character trait? What is a physical trait? What are the physical and character traits of heroes?	• A recipe for a hero? Brainstorm chart • Reading from Joseph Campbell's, A Hero With A Thousand Faces • Clips from Star Wars, Spider Man and Happy Gilmore to illustrate the existence of archetypal structure within modern movies • Design your own hero: Name, draw a picture of him or her, outline character traits.	<u>TheHero with a Thousand Faces</u> By Joseph Campbell <u>The Odyssey</u> By Homer Movie Clips: Star Wars, Spider Man, Happy Gilmore	Vocabulary quiz Design your own hero poster Using the worksheet, outline the archetypal stages in your Hero's journey. Add this to your Hero poster.

	Focus Questions	Reading / Writing Mini Lessons	Activities	Source Materials	Student Assessment
Week Three	What are the major differences between oral and written traditions of story telling? Why is it important for a hero to have a special birth?	Making predictions—In the movie, Whale Rider, how will Paikea's special birth affect her relationship to family and shape her path as a hero? How does the special birth of Paikea compare to the special birth of Hatshepsut, the female Pharoah? How do you use transition words to show comparison and contrast? What techniques can you use to understand the mood of a piece of writing? How can setting details be used to develop mood? Why is it important to describe the setting and create a mood at the beginning of a myth?	• Telephone game to illustrate the impact of oral tradition on story telling • View the movie "Whale Rider" and complete a graphic organizer to illustrate how Paikea fits the mold of an archetypal hero • Performance of the myth of Hatshepsut (short play) • Analysis of story beginnings. Annotation of setting detail, transitions, and mood creating actions / adjectives. • Watch a hero / adventure movie to see if you can identify the existence of an archetype	• Whale Rider – movie • Ancient Egypt: Read Aloud Plays by John Rearick	Great beginnings packet: Questions and passages for annotation Vocabulary Quiz **Homework** Read the myth of Sunjata Compare and contrast Paikea and Hatshepsut: Graphic organizer and one page written response. Special Birth Story—one page, double-spaced, 12 point font.

	Focus Questions	Reading / Writing Mini Lessons	Activities	Source Materials	Student Assessment
Week Four	How can you use the hero archetype to complete your hero myth?	How do you use model texts as tools for writing emulations? How do you properly structure dialogue? How do you slow down time in the writing of a narrative? What is imagery? How can you incorporate imagery into the writing of your myth?	Complete the following stages of your hero myth: Call to adventure, Trials or challenges, Belly of the Beast, The Return. Turn one of the stages of your hero myth into a script to be performed in class or on video outside of school. Interview a hero. Write a letter to someone whom you consider a modern hero.	The Power of Myth, PBS video of Joseph Campbell	Hero Stories Quiz on the archetypes of mythology Performance of one stage of the hero myth Homework Daily Homework: Work on the writing of your hero myth for 40 minutes each night this week.

	Focus Questions	Reading/Writing Mini-Lessons	Activities	Source Materials	Student Assessment
Week Five	Why has the importance of mythology and oral tradition diminished in modern societies? What do the stories of modern Bedouin women reveal about life in Egypt? How do these stories compare to those of modern women living in urban centers such as Cairo?	How can you use a checklist to help you revise and edit your myths before publication? What is the purpose of creating a Writer's Gallery? What do the short stories of Naguib Mahfouz reveal about modern Egyptian society? What are the elements of an anthropological case study? How does the writing in Lila Abu-Lughod's anthropological study of modern Bedouin women differ from the writing in fictional accounts such as those of Mahfouz? What is revealed about modern Bedouin life in Writing Women's Worlds? How does the Geography of Egypt affect how the Bedouins live and travel?	Peer editing of students' hero myths Illustrating and final publication of hero myths Writer's Gallery of students' hero myths, gallery response sheets Egypt in current events: Students clip one article about modern Egypt from print or online newspapers. Paste them into a book they create with construction paper and string. Students end the week by writing a one page response to the articles they included in their books. Read selections of short fiction from Mahfouz. Read two nonfiction Bedouin stories from Writing Women's Worlds.	• Writing Women's Worlds: Bedouin Stories by Lila Abu-Lughod • The Cairo Trilogy By Naguib Mahfouz • The New York Times	Vocabulary Quiz Hero Myth – Final Project Homework • Type final draft of hero myth • Complete illustrations for the hero myth • Critical thinking questions • Postcard from Cairo or the Sahara • Current events

	Focus Questions	Reading/Writing Mini-Lessons	Activities	Source Materials	
Week Six	What critical governmental, religious or cultural issues are of greatest concern to modern Egyptian people?	How do you post writing on a blog? How do you post feedback to your classmates on a blog? How do you write a one act play? How do you write and structure stage directions within a dramatic script? How do you conduct research using the internet?	• Demonstrate blog and practice using projector and laptops. • Post hero myths on our blog. • Use current event books to brainstorm critical issues in modern Egypt. • Research one of the issues on the brainstorm list, then write a ½ page post on the blog that describes the issue and illustrates why it is something of critical concern to Egyptian people. • Using the stories from Writing Women's Worlds, construct a one act play that illustrates a day in the life of a Bedouin woman in Egypt. • Using the stories from The Cairo Trilogy, write a one act play that illustrates a day in the life of a person living in modern Cairo.	• Writing Women's Worlds: Bedouin Stories by Lila Abu-Lughod • The Cairo Trilogy by Naguib Mahfouz	• Blog posts • Performances of scripts Homework • Write a script based on one of our class readings • Use the blog to read about the critical issues identified by your classmates and post feedback to them in the form of questions or comments.

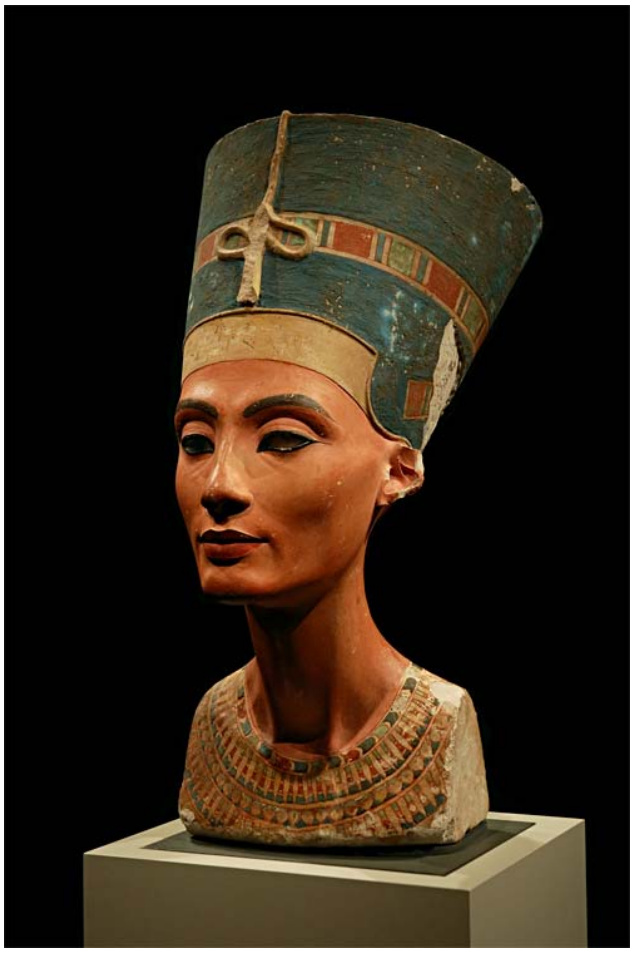
Unit of Study: EGYPT Essential Question:

Focus Questions	**Disciplines**	**I.** Initial activities that introduce, build and engage students with content knowledge, concept, skill, etc.
Content: **Process:** **Attitudes and Attributes:** The student will:	**Literacy**	
	Math/ Science	
	Social Studies	
	The Arts	
	Technology	

Essential Question: How does geography influence where people choose to live and why?

Disciplines	**II.** Extension activities that challenge students to deepen their understanding through inquiry and application, analysis, synthesis, etc. of knowledge, concept, skill	**III.** Culminating activities for independent or small group investigations that allow students to create, share, or extend knowledge while capitalizing on student interests	**Resources Needed**
Literacy			
Math/ Science			
Social Studies			
The Arts			
Technology			

LESSON PLANS



SOCIAL STUDIES VOCABULARY

Amulet: a small object worn to ward off evil, harm, or illness or to bring good fortune.

Anno Domini: Latin for "The year of our Lord, "referring to the number of years after Jesus Christ was born.

Arabic: the standard literary and classical language as established by the Koran, now spoken in countries of the Middle East and North Africa.

Archeologist: an anthropologist who studies prehistoric people and their culture.

Archetype: (in Jungian psychology) an unconscious idea, pattern of thought, image, or symbol that is present universally in everyone, no matter what culture. An archetype can be thought of as an original model, an ideal example, or symbol. Some examples of archetypes are the hero, the outsider, the villain, mother, child, father.

Artifacts : an object produced or shaped by human craft, especially a tool, weapon, or ornament of archaeological or historical interest.

British occupation of Egypt: began in 1882 and lasted for 72 years.

Caliph: a spiritual leader of Islam, claiming succession from Muhammad.

Canopic jar: a jar used in ancient Egypt to contain the organs of an embalmed body.

Carbon 14 dating: determining the age of objects of organic origin by measuring the radioactivity of their carbon content.

Cataract : a descent of water over a steep surface; a waterfall, especially one of considerable size.

Christian Orthodox: considered to be the same church established by Christ and his Apostles.

Colonialism: the control or governing influence of a nation over a dependent country, territory, or people.

Colony: a group of people who leave their native country to form in a new land a settlement subject to, or connected with, the parent nation.

Conquest: the act conquering or the state of being conquered.

Dehydration: an abnormal loss of water from the body, especially from illness or physical exertion.

Delta : a nearly flat plain of alluvial deposit between diverging branches of the mouth of a river, often, though not necessarily, triangular. (for example, the Nile delta)

Diversity: variety, point of difference.

Domestication of animals: a population of selected animals or plants become accustomed to human provision and control.

Dynasty: a sequence of rulers from the same family or group.

Egyptian Jews: (different from Jews of Egypt) the original population of Jews who lived in Egypt.

Equality: the state of being equal.

Feminism: the doctrine advocating social, political, and all other rights of women equal to those of men.

Flail: an instrument used to thresh grain, a staff or handle to which is attached a swinging stick or bar.

French occupation of Egypt: began in 1798 by Napoleon.

Invade: to enter a country or territory with military force.

Irrigation: the artificial application of water to land to assist in the production of crops.

Islam: the religious faith of Muslims, founded by the prophet Muhammad, who recorded the revelations of the god Allah in the sacred book called the Koran.

Kemet: the native Egyptian name for Egypt and the native term for the Egyptian language.

Lower Egypt is the northern-most section of Egypt. It refers to the fertile Nile Delta region, which stretches from the area between El-Aiyat and Zawyet Dahshur, south of modern-day Cairo, and the Mediterranean Sea.

Middle Egypt is the section of land between Lower Egypt and Upper Egypt, stretching from El-Aiyat in the north to Asyut in the south.

Mattox, Henry: Foreign Service officer in the mid 1900's, including a diplomatic posting to Egypt.

Mediterranean Sea: surrounded by Africa, Europe, and Asia 2400 mi. (3865 km) long; 1,145,000 sq. mi. (2,965,550 sq. km); greatest known depth 14,436 ft. (4400 m).

Monarch: a hereditary sovereign as a sole and absolute ruler of a state or nation (king, queen, or emperor).

Monotheistic: the doctrine or belief that there is only one God.

Multiculturalism: the preservation of different cultures or cultural identities within a unified society, as a state or nation.

Mummification: to make a dead body into a mummy, as by embalming and drying.

Mummy: the dead body of a human being or animal preserved by the ancient Egyptian process or some similar method of embalming.

Muslim: of or pertaining to the religion, law, or civilization of Islam.

Myth: a traditional or legendary story, usually concerning some being or hero or event, with or without a determinable basis of fact or a natural explanation, especially one that is concerned with deities or demigods and explains some practice, rite, or phenomenon.

Nile River : the longest river in the world, flowing through east Africa, north from Lake Victoria to the Mediterranean. 3473 mi. (5592 km) long; from the headwaters of the Kagera River, 4000 mi. (6440 km) long.

Oasis: a small fertile or green area in a desert region, usually having a spring or well.

Papyrus: a tall, aquatic plant native to the Nile valley; the Egyptian subspecies, C. papyrus hadidii, thought to be common in ancient times, now occurs only in several sites; a material on which to write, prepared from thin strips of the pith of this plant laid together, soaked, pressed, and dried, used by the ancient Egyptians, Greeks, and Romans.

Egyptian Social Structure: Egyptian society was structured like a pyramid, with the Pharaoh at the top of the pyramid, then Government Officials/Nobles/Priests, Soldiers, Scribes, Merchants, Artisans, Farmers, and the Slaves and Servants at the bottom of the pyramid.

Pharaoh: a title of an ancient Egyptian king.

Polytheistic: belief in more than one god or in many gods. (Osiris, Isis, Ra and Anubis)

Preservation: to prepare any perishable substance so as to resist decomposition.

Religion: a set of beliefs concerning the cause, nature, and purpose of the universe, usually involving devotional and ritual observances, and often containing a moral code governing the conduct of human affairs.

Priest: a person whose office it is to perform religious rites, and especially to make sacrificial offerings.

Quern: primitive, hand-operated mill for grinding grain.

Religious fanatics: a person marked or motivated by an extreme, unreasoning for a cause or religion.

Republic/Government: a state in which the supreme power rests in the body of citizens entitled to vote and is exercised by representatives chosen directly or indirectly by them. The head of government is not a monarch or other hereditary head of state.

Ottoman Empire occupation: 1517, Cairo's independence was transferred to Constantinople. The Ottoman Empire declined through 1500's, 1600's, 1700's

Sahara Desert: the world's largest desert is located in northern Africa (3,500,000 square miles).

Sarcophagus: a stone coffin, especially one bearing sculpture, inscriptions, often displayed as a monument.

Shadoof: a device consisting of a long suspended pole, weighted at one end and having a bucket at the other end, used in the Near East and especially Egypt for raising water, as for the irrigation of land.

Nilometer: an instrument for measuring the rise of water in the Nile during its periodic floods.

Slaves: someone bound in servitude as the property of a person or household.

Tomb: an excavation in earth or rock for the burial of a corpse; a burial chamber; a grave.

Vizier: a high official in certain Muslim countries and caliphates, especially a minister of state.

SCIENCE VOCABULARY

Abiotic: characterized by the absence of life or living organisms.

Abiotic Factors: pertaining to any non-biological factors that play a role in an organism's environment; non-living environmental factors.

Actual Mechanical Advantage: mechanical advantage of a real machine that takes into consideration forces like friction, that ideal mechanical advantage does not consider in the theoretical case.

Adaptation: a form or structure modified to fit a changed environment. For example, a device or mechanism, that is changed or changes so as to become suitable to a new or special application or situation. Change in behavior of a person or group in response to new or modified surroundings.

Ancient Civilization Biogeography: the study of the geographical distribution of living things.

Biodiversity: the number and variety of organisms found within a specified geographic region.

Biomes: a major regional or global biotic community, such as a grassland or desert, characterized chiefly by the dominant forms of plant life and the prevailing climate.

Biotic: having to do with life or living organisms.

Biotic Factors: an influence or effect created by an organism; an effect of an organism's actions within an environment.

Climatic Zones: Koppen climate classification: Tropical, Dry, Temperate, Continental, Polar.

Climatology: the science that deals with the phenomena of climates or climatic conditions.

Coastal Geography: the branch of geography that studies the dynamics between the ocean and the land, incorporating both the physical geography (coastal geomorphology, geology and oceanography) and the human geography (sociology and history) of the coast. It involves an understanding of coastal weathering processes, particularly wave action, sediment movement and weather, and also the ways in which humans interact with the coast.

Coniferous Biodiversity: any of various mostly needle-leaved or scale-leaved, chiefly evergreen, cone-bearing gymnospermous trees or shrubs such as pines, spruces, and firs.

Desert: a region so arid/dry, because of little rainfall, that it supports only sparse and widely spaced vegetation or no vegetation at all; any area where few forms of life can exist because of lack of water, permanent frost, or absence of soil.

Geography: the study of all the physical features of the Earth's surface and including climate, distribution of plant, animal, and human life.

Human Geography: a political/cultural branch of geography concerned with the social science aspects of how the world is physically arranged; also called anthropogeography.

Hydrology: the science dealing with the occurrence, circulation, distribution, and properties of the waters of the earth and its atmosphere.

Inclined Plane: one of the simple machines, a plane surface inclined to the horizon, or forming with a horizontal plane any angle but a right angle.

Landscape Geography: the science of the structure of the natural environment.

Lever: a simple machine; a rigid bar that pivots about one point and that is used to move an object at a second point by a force applied at a third.

Mechanical Advantage: the ratio of output force to the input force applied to a mechanism.

Mediterranean: pertaining to, situated on or near, or dwelling about the Mediterranean Sea. A person whose physical characteristics are considered typical of the people native to or inhabiting the Mediterranean area.

Mountain: a natural elevation of the earth's surface rising more or less abruptly to a summit, and attaining an altitude greater than that of a hill, usually greater than 2000 ft. (610 m).

Physical Geography: the branch of geography concerned with natural features and phenomena of the earth's surface, as landforms, drainage features, climates, soils, and vegetation.

Polar: pertaining to the North or South Pole.

Pulley: a simple machine; a wheel, with a grooved rim for carrying a line, that turns in a frame or block and serves to change the direction of or to transmit force, as when one end of the line is pulled to raise a weight at the other end.

Rainforest: a tropical forest, usually of tall, densely growing, broad-leaved evergreen trees in an area of high annual rainfall.

Screw: a simple machine; a threaded cylindrical pin or rod with a head at one end, engaging a threaded hole and used either as a fastener or as a simple machine for applying power, as in a clamp, jack, etc

Simple Machines: in physics and engineering, a simple machine is a mechanical device that changes the direction or magnitude of a force; the simplest mechanisms that use mechanical advantage/leverage to multiply force. A simple machine uses a single applied force to do work against a single load force. Usually the term refers to the six classical simple machines which were defined by Renaissance scientists: lever, wheel and axle, pulley, inclined plane, wedge, and screw.

Temperate: acclimate that has a range of temperatures that are moderate; not subject to prolonged extremes of hot or cold weather.

Terrarium Biodiversity: creating a small, enclosed environment with a variety of organisms (plants and sometimes small land animals), based on a specific geographic region.

Terrarium: a small enclosure or closed container in which selected living plants and sometimes small land animals, such as turtles and lizards, are kept and observed.

Topographic Map: a map showing the relief features of the earth's surface, usually by means of contour lines to show changes in elevation.

Tropical: very hot and humid.

Tundra: one of the vast, nearly level, treeless plains of the arctic regions of Europe, Asia, and North America.

Wedge: a simple machine; a piece of hard material with two principal faces meeting in a sharply acute angle, for raising, holding, or splitting objects by applying a pounding or driving force, as from a hammer.

Wheel & Axle: a simple machine consisting of a cylindrical drum with a wheel concentric with the drum attached: ropes are applied so that as one unwinds from the wheel, another rope is wound on to the drum.

Lesson Plan

Social Studies

Unit of Study/Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Questions: What natural resources were used to develop Egyptian architecture? What can we learn from the structures built with these natural resources?

Students will:

- Understand how to locate and analyze primary sources for architectural structures.
- Analyze architectural structures in ancient Egypt including step pyramid, great pyramid, bent pyramid, and temple.
- Distinguish between a step pyramid, great pyramid, bent pyramid, and temple.
- Identify and interpret the functions of the different structures in ancient Egypt.

Why/Purpose/Connection:
Students in the 6th Grade will be able to:

- Identify distinguishing features of Egyptian architectural structures.
- Understand the significance of architecture as it relates to Egyptian culture and religion.
- Locate and analyze primary sources for architectural structures.
- Distinguish differences between the various types of pyramids and temples.

Materials/Resources/Readings:

Sample Egyptian Architecture in contemporary society

- Washington monument/Obelisk http://www.nps.gov/nr/travel/wash/dc72.htm
- Egyptian Architecture (http://www.touregypt.net/featurestories/temples.htm)
  - Pharaoh Taharqo Obelisk at Karnak
  - Pharaoh Djoser Step pyramid at Saqqara
  - Pharaoh Khephren Pyramid
  - Pyramid of Giza
  - Pharaoh Tutmose I Obelisk
  - Sphinx

  - Temple at Abu Simbel
  - Temple of Luxor
  - Temple of Amun at Karnak
  - Temple of Isis at Philae
- Templates for analyzing primary sources

Mini-Lesson (Model/demonstration)

- Provide students with a photograph of the Djoser Step pyramid at Saqqara (http://www.touregypt.net/featurestories/dsteppyramid1.htm)
- Students observe the image and together with the teacher write questions and observations about the step pyramid.
- Discuss vocabulary specific to this structure.

Questions:
What do you think it is? Who built this? Why did the Egyptians build it? How did they build it? For what was it used? What materials do you think they used to build it? What makes it so amazing? How old do you think it is? Is it a primary source? What is so unique about this architectural structure? Do you think they used machines to build it? How big do you think it is? What can we learn from this structure?

Observations:

large	triangle shape	steps
sand	stone	

- Whole Class Share of student observations and questions

Student Exploration/Practice:

- In small groups-students look at additional photographs of other architectural structures in Ancient Egypt.
- Students use a primary source analysis template to help them analyze the architectural structures.
- Students design their own pyramids and use an array of different materials to construct their own pyramids. Sample materials can include: sugar cubes, popsicle sticks, toothpicks, sand, modeling clay.
- Students write an explanation of how their structure was built and the difficulties with which they were confronted while building their structures.

Share/Closure:

- Slides or photographs of the student-built architectural structures are displayed.
- Students present their findings to the rest of the class.
- Review what the class has learned about ancient Egyptian architecture.

Next Steps:

- Students develop a scrap book of different structures in ancient Egypt
- Class develops a comparison chart of structures in ancient Egypt and in Egypt today.
- Students investigate what these structures were used for in ancient Egypt (Tombs)
- Students make a model pyramid to scale using materials that would have been found in Egypt.
- Students create a "How To" informational brochure showing the steps for building a pyramid.

Field Trips:
The Brooklyn Museum has one of the finest and largest collections of Egyptian Art in the United States.

- The Brooklyn Museum Brooklyn, New York
  http://www.brooklynmuseum.org
  youth.tours@brooklynmuseum.org
  school.programs@brooklynmuseum.org
  teacher.services@brooklynmuseum.org

- The Metropolitan Museum of Art in New York City
  http://www.metmuseum.org

School to Home Connection:

- The Brooklyn Museum has online resources for families. There is an entire section on Ancient Egypt. http://www.brooklynmuseum.org
  Click on Education, then click on Youth and Families
- Students plan an imaginary trip to Egypt with their families. Use online resources and classroom knowledge to plan a trip to historic sites, museums and exhibits, designated cities, cruise on the Nile River, explore the cuisine of Egypt through its restaurants, and shop for souvenirs. Use the travel websites to develop a realistic budget. Use travel brochures designed by students to facilitate the trip planning. Publish the trip plan with realistic itinerary and budget.
- Students share their classroom activities with their families, including any structures built, websites with interactive sections, and field trip reflections.
- Family visit to The Brooklyn Museum and/or The Metropolitan Museum of Art.

Primary Source Analysis

Name of the architectural structure: _____

Observations	Questions about the structure
Findings/Facts	What can we learn from this structure?

Canopic Jars

Lesson Plan

Social Studies & Art

This Lesson Plan takes place over several days.

Unit of Study/Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Questions: How do artifacts found by archeologists help us better understand ancient Egypt? How do we design our own canopic jars? What are the rituals of the mummification process?

Students will:

- Analyze the importance of canopic jars in the Egyptian mummification process.
- Understand the importance of the four canopic jars to the mummification burial ceremony.
- Understand the symbolic meaning of the four jars and their designs.
- Design and make individual canopic jars.
- Review the mummification process and Egyptian burial ceremonies.

Why/Purpose/Connection:
Students in the 6th Grade will be able to:

- Review what they have already learned about the mummification process and Egyptian burial ceremonies.
- Design their own canopic jars in the style of the ancient Egyptians and construct their own jars.

Materials/Resources/Readings:

- one small plastic jar or bottle, with top, per student
- Pre-plastered gauze rolls (can precut into 2-inch wide pieces)
- self-hardening modeling material (such as Crayola´s Model Magic available in 2 lb. tubs)
- acrylic or tempera paint
- paint brushes
- masking tape
- paper towels
- pencils or clay working tools

- thin-tipped non-toxic black markers
- covered work surface
- aprons or paint shirts
- small bowls of water to moisten Pre-plastered gauze rolls

Mini-Lesson (Model/demonstration):

- Students are presented with a slide show or photographs of canopic jars and observe them. For what are they used? What do you think the ancient Egyptians kept in the jars? What do they look like? How were they designed? Point out to students that there are four jars with heads. (Use observation handout 1.)
- Show students each of the heads (jackal, baboon, falcon and human head). Using Handout 2, review prior information with the students regarding what the jars were used for in ancient Egypt.
- Identify each jar. Teach the students that each jar held a human organ and it was part of the mummification process. (Handout 3)
    - Jackal held the stomach
    - Baboon held the lungs.
    - Falcon held the intestines.
    - Human head held the liver.
- Teacher demonstrates all the steps involved and then students work independently. These canopic jars will take several days to design and make.

Students Exploration/Practice:

The following project will take several days and must include drying time for materials and paint.

Step 1/Day 1 and Day 2

- Form a jar bottom by first applying wadded-up paper towels and masking tape to build up a more "canopic-like" shape.
- Apply plaster in overlapping layers and smooth. Do not cover jar tops, because they will be used to form the heads in the next session. Label the jars with the student name on the bottom and allow the jars to air dry for a day or two.

Step 2/Day 3 and Day 4

- Students review four types of heads used by the ancient Egyptians or use their observation handouts. Students select an Egyptian design or create an original design for their own head.
- Students remove top from jar and use a small amount of Model Magic to form the head directly on the cap. [Hint: The squeeze-type cap provides a framework for the modeling compound. This won't work as well with flat tops.] Pencils or small clay tools can be used to form details.

Step 3/Day 5

- Review traditional materials used to make canopic jars - clay, stone and alabaster.
- Students paint their entire jar a solid color. We used gray for stone and ochre for alabaster. Allow jars to dry thoroughly.

Step 4/Day 5

- Using their observation sheets of Egyptian canopic jars, students add authentic details of symbols and hieroglyphs to their jars.

Share/Closure:

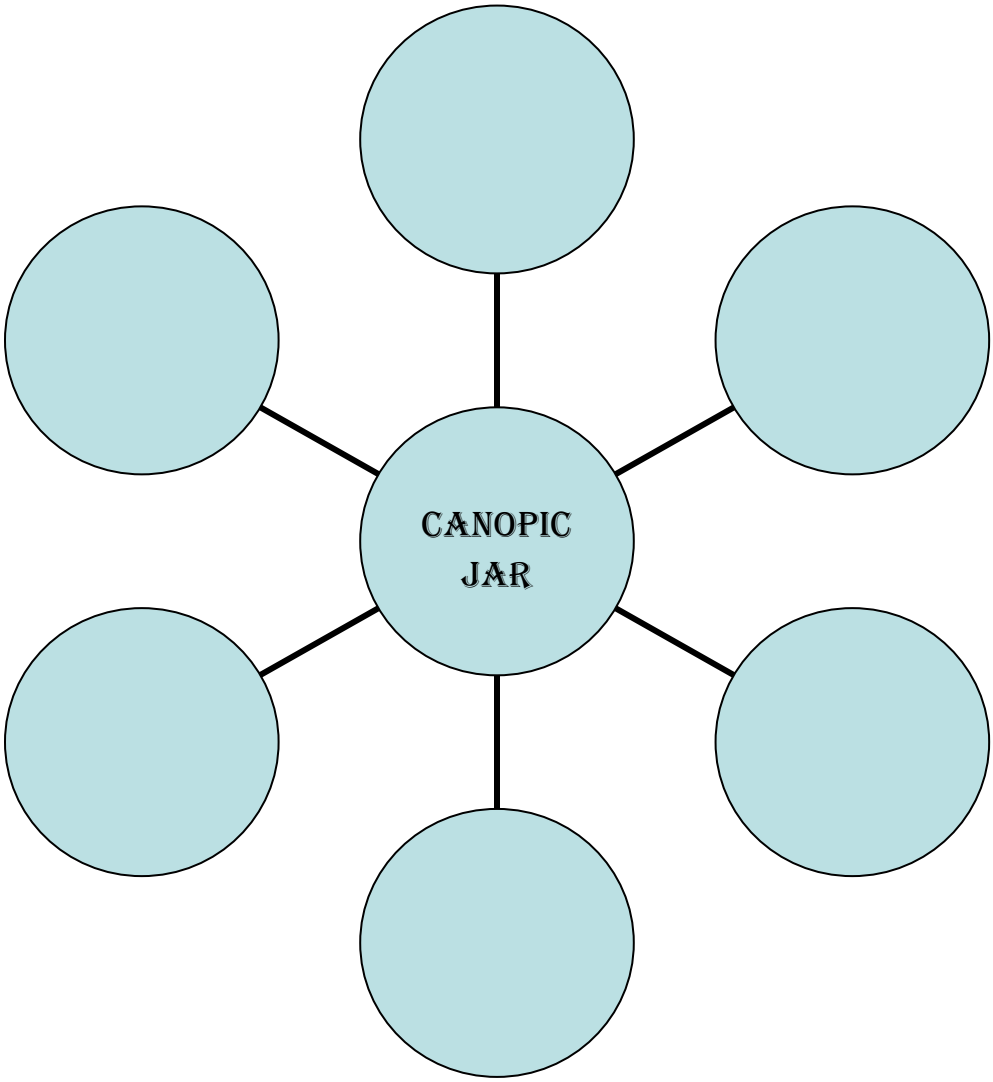
- Students present & display their canopic jars and provide an explanation of the symbols they used.

Next Steps:

- Students use the jars in a reenactment of an Egyptian mummification ceremony.
- Students write a reflection about the process of making the jars and the importance of the jars to the ancient Egyptian burial ceremony.
- Write a hypothesis as to why the ancient Egyptians removed these specific organs and placed them in canopic jars.
- Display the jars in the classroom and invite other classes in for presentations and/or reenactments.

School to Home Connection:

- Students share their original canopic jars with their family members. Discuss what they have learned about ancient Egyptian mummification and burial ceremonies with family members.
- Students and families visit museums together to view ancient Egyptian artifacts.


CANOPIC
JAR

Wonderings/Questions:
1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Canopic Jar

What is the design of the Canopic Jar?	What purpose did the Canopic Jar have?
Why was it important to the Ancient Egyptian?	What materials were used to make the Canopic Jar?

Canopic Jars

Suggested Final Project

Travel Brochure of Egypt

Working in small groups, students will create a realistic travel brochure of Egypt. Students select ten important facts to include in the brochure. Some possible facts which can be included:

- ✓ detailed map of Ancient Egypt
- ✓ list of major cities
- ✓ list of landmarks with visual images
- ✓ information about language(s) spoken
- ✓ facts about the government
- ✓ information about the culture of Ancient Egypt
- ✓ types of transportation a visitor might see and use
- ✓ how natural geography played an important role in the lives of people
- ✓ performing arts venues and performances
- ✓ museums
- ✓ restaurants, ethnic foods
- ✓ recreation and outdoor activities
- ✓ national and local parks
- ✓ maps
- ✓ weather during all seasons, average high and low temperatures, rainy and dry seasons
- ✓ tourism agency locations and phone numbers
- ✓ passport and visa information
- ✓ hieroglyphic message to be decoded using a hieroglyphic decoder such as The Hieroglyphic Alphabet or Hieroglyphic Decoder.

This project requires students to examine a variety of travel brochures to assist them with the layout and the information which is included in these types of brochures. Students should be permitted to analyze travel brochure to get ideas for their own brochures. If students have access to technology, Microsoft Publisher can be used to organize their travel brochure. Teachers should assign group roles/responsibilities and select the topics/headings to be included in the brochure. This assignment requires students to take good notes and research Egypt's past and present. Students are required to organize their information/observation handouts and other materials in preparation for categorizing their brochures. Students need to select several images or illustrations which can be included. Students are responsible for creating all aspect of the travel brochure.

Form: Analyzing a Travel Brochure
Use as a guide for students when they critique other students' brochures.

Form: Assessment Rubric for Travel Brochure Project
Use for assessing whether student achieved Level 4, 3, 2, or 1 on this project. Students use this as a guide for their brochures.

Lesson Plan

Social Studies

Unit of Study/Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Questions: How has Egyptian society changed through time? How does religion influence women's roles in Egyptian society?

Students will:

- Analyze how religion dictates Islamic women's roles in their society.
- Research the current conflict that exists among Muslim women who seek civil equality in the modern world.

Why/Purpose/Connection:
Students in the 6th Grade will be able to:

- Develop familiarity with the three major religions that co-exist in Egypt.
- Understand the relationships of the religions to each other.
- Analyze the role of women in Islamic culture.

Materials/Resources/Readings:

- Copies of "Where Muslim Traditions Meet Modernity" (one per student) (http://www.nytimes.com/learning/teachers/featured_articles/20011219wednesday.html)
- Resource materials about various religions (world history, world religion and geography texts; encyclopedias; reference books; computers with Internet access)
- Copies of the Koran

Mini-Lesson:

Step 1

Write on the board Islam/Muslim

Students answer the following guiding questions: What do they know about this religion? What are some questions they have about the religion?

- Brief class discussion using the following questions as a guide:
  - What is your general perception of this religion?

- Does this religion have a positive, negative, or neutral reputation in the world? In the West? In the Mideast? What influences this reputation in each region?
- Should any aspects of a religion have to change in order to fit into the modern world?
- Should religion conform to a changing society?
- In what ways might very religious people have difficulty accepting or adapting to "modernity"?

Step 2

- Students read the following article "Where Muslim Traditions Meet Modernity" (referenced above) and answer the following questions:
  - According to this article: Is there a separation between religion and government? How does this affect women?
  - How are women treated according to the article? Are they equal to men?
  - What is the role of Muslim women in society?
  - Why are some Muslim women challenging the legal code?
  - How have attempts to broaden rights for women in Muslim countries been rejected?
  - Why are fundamentalists fearful of Muslim women receiving equal protection under the law?
  - Why do you think Morocco was chosen as the "case study" for this article? What is the "moudawana," and how would it change with proposed legislation?
  - How has the role of Islam changed around the world? Why are some countries more likely to change than others?

Whole class participates in a discussion about their findings regarding Muslim women in today's society.

Step 3

- Students are divided into small groups and research the role of women in several Muslim countries. (Egypt, Morocco, Saudi Arabia, Iran are some possible choices)
  http://www.religioustolerance.org/islam.htm
  http://www.islam-online.net
- Students use the following questions to guide them in their research
  - What rights do women have in these Islamic nations? (Education, marriage/divorce, legal rights, social class and equality)
  - How are women treated in comparison to men?
  - Do these countries have a separation between church and state?

- Are these nations changing their policies to conform to the changing modern world? Why or why not?

Step 4

- After students have completed their research they will hold a class debate. Debate Topic: Should Muslim nations change their laws in order to accommodate women's legal rights? They will use the information from the Muslim nations they researched to support their arguments.

If the class has not previously engaged in debates, then "debate protocol" instruction should take place prior to the actual debate. This instruction is in addition to the above lessons.

Share/Closure

- Students have a group discussion about the debate. Review what they have learned about Islamic women and compare it to women in the United States.

Next Steps:

- Write an article comparing women in the United States and in Muslim nations.
- Write a research paper about how the roles of Muslim women in Egypt have changed through time.
- Develop a Timeline of how the roles of Muslim women have changed through time.
- Research other religions in Egypt and write about the difficulties people encounter while living in a predominately Muslim nation.
- Research how Egyptian society is dealing with modernity in other areas of their society.

School to Home Connection:

- Students share their research and class project information with their families.

- Students hold a debate with family members referencing issues discussed in class and using standard "debate protocols."

Lesson Plan

Social Studies-Travel Brochure Project

Unit of Study/Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Question: How is information about a country used to develop a purposeful brochure?

Students will:

- Analyze travel brochures to gain an understanding of how this type of informational brochure is organized.
- Understand the elements of a good travel brochure and use this information to develop their own Egyptian travel brochure.

Why/Purpose/Connection:
Students in the 6th Grade will:

- Research Egypt's past and present and take notes in order to organize information for their brochure.
- Analyze travel brochures to assist them in understanding the format and content of this type of informational brochure.
- Use other sources to assist in the creation of a travel brochure, such as internet resources, books, magazines, and newspapers.
- Create original individual travel brochures of Egypt.

Materials/Resources/Reading:

- Analysis handout
- Sample brochure form a travel agent or internet

Mini-Lesson (Model/demonstration)

- Teacher asks students to share their experiences while traveling. Use the following guiding questions. Where did they go? How did their families decide to go to these places? What kinds of brochures, travel guides, books, and/or advertisements did their families explore before traveling? Students share what they know about travel guides and travel brochures.

- Teacher displays several travel brochures and informs students that they will create their own travel brochure of Egypt.
- Teacher analyzes a travel brochure cover using the following guiding questions;

  Are there maps? Photos? Diagrams? Other illustrations? What kind of language and vocabulary is used? How is the text in the brochures presented? Paragraphs? Bulleted lists? Are there specific places highlighted? What kind?
- Students and teacher have a brief discussion about their findings.

Student Exploration/Practice:

- In groups students analyze a travel brochure using the analysis handout as a guide. They are given a significant amount of time to analyze the layout, highlight features, illustrations and content.

Share/Closure:

- After the students have had some time to look through the brochures, ask them to share more about what they saw in the brochures.
- Students brainstorm what information/topic the travel brochures contain. Teacher record their responses on the board or on chart paper. Then inform students that their travel brochure would need to contain this specific information: Brief summary of the setting, with highlights of important places, location, including a map, Geography, Major cities, Well-known places, Historic Sites and Landmarks, Recreation and Outdoor Activities-parks, sports, water, Entertainment, Climate and overall weather conditions, Transportation, Arts and Culture, including museums, theaters, places to visit, Languages and Local Dialect, Food that the area is known for and Pictures/Graphics.

Next Steps:

- Students are presented with the rubric and an outline of the project.

Analyzing a Travel Brochure

1. What is the first thing you notice about the travel brochure? Explain the design of the cover.

2. What is the layout of the brochure? Is it easy to follow or confusing? Why?

3. Does the brochure make you want to travel to that destination?

4. Make a list of specific information that you find in the brochure.

5. Do you think the brochure is missing any information that would be important to a traveler? List the information.

6. How would you improve this travel brochure to make it more informative or helpful to a traveler?

Travel Brochure Websites:
These sites provide information on sample travel brochures and travel information on an array of countries.

- www.lonelyplanet.com
- www.travel.yahoo.com
- www.mapquest.com
- www.maps.nationalgeographic.com/mapmachine
- www.cia.gov
- www.travel-library.com
- www.exite.com/travel
- www.yahoo.travelon.com
- www.expedia.com
- www.wtg-online.com

Egyptian Travel Brochure Rubric

Category	Level 4	Level 3	Level 2	Level 1
Headlines Layout & Captions	Headlines are relevant and immediately engage the reader. Travel brochure is organized into neat, typed columns.	Headlines are relevant and attempt to engage the reader. Travel brochure is organized into neat, typed columns.	Headlines are relevant and Travel brochure is organized into neat, typed columns.	Headlines are irrelevant. Travel brochure is not typed or organized appropriately.
Conventions	Travel brochure is clearly organized with few or no errors in grammar, spelling, and punctuation.	Travel brochure is well organized with minor errors in grammar, spelling, and punctuation.	Travel brochure shows some organization. Some rules of grammar, spelling, and punctuation are followed.	Travel brochure contains many errors in grammar, spelling, and punctuation. Confuses the reader.
Graphics & Creativity	Attractive graphics support the text by providing visual reinforcement of ideas and information. All graphics have captions that accurately describe the visual.	Graphics support the text by providing visual reinforcement of ideas and information. All graphics have captions that somewhat describe the visual.	Some graphics support the text. Most graphics have captions that describe the visual.	Graphics do not support the text. Many captions are missing.
Use of primary sources	At least 10 primary sources are used and all are accurately documented in the desired format.	At least 10 primary sources are used and most are accurately documented in the desired format.	At least 7 primary sources are used and most are accurately documented in the desired format.	Few primary sources are used and are not accurately documented.
Historical Accuracy	Information demonstrates a solid understanding of events and issues surrounding Egypt past and present.	Mostly demonstrate a satisfactory understanding of events and issues surrounding	Some demonstrate an understanding of events and issues surrounding	Do not demonstrate an understanding of the events and issues surrounding Egypt past and

		Egypt past and present.	Egypt past and present.	present.
Content	Includes many interesting, unique, and accurate facts and details about Egypt.	Includes some interesting, unique, and accurate facts and details about Egypt.	Includes facts and details about Egypt.	Includes very few facts and details about Egypt.
Elements	Travel brochure contains all of the required elements: short summary of the setting, with highlights of important places, location, including a map, geography, major cities, historic sites and landmarks, recreation and outdoor activities, overall weather, transportation, arts and culture, including museums, theaters, places to visit, languages and local dialect, food for which the area is known & visuals/graphics	Travel brochure contains most of the required elements: short summary of the setting, with highlights of important places, location, including a map, geography, major cities, historic sites and landmarks, recreation and outdoor activities, overall weather, transportation, arts and culture, including museums, theaters, places to visit, languages, and local dialect, food for which the area is known & visuals/graphics.	Travel brochure contains some of the required elements: short summary of the setting, with highlights of important places, location, including a map, geography, major cities, historic Sites and landmarks, recreation and outdoor activities, overall weather, transportation, arts and culture, including museums, theaters, places to visit, languages, and local dialect, food for which the area is known & visuals/graphics .	Travel brochure contains few of the required elements: short summary of the setting, with highlights of important places, location, including a map, geography, major cities, historic sites and landmarks, recreation and outdoor activities, overall weather, transportation, arts and culture, including museums, theaters, places to visit, languages, and local dialect, food for which the area is known & visuals/graphics.

Collaboration	All members of the group contribute equally to the production of the paper. The work is distributed evenly among all of the members.	All members of the group try to contribute equally to the production of the paper. The work is distributed evenly among all of the members.	Most members of the group contribute equally to the production of the paper. The work is distributed somewhat evenly among all of the members.	Group members work individually and do not function together as a cohesive unit.
Research	Brochure is well researched in that it uses a large variety of sources.	Brochure is researched using a variety of sources.	Brochure uses few sources.	Article shows very little research.

Lesson Plan

Social Studies & English Language Arts

Unit of Study / Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Questions: What is ahero? Where do ideas about heroes originate?

Students will:

- Learn that heroes come in many different forms.
- Understand that hero stories are common to almost every culture and that they often share similar motifs. These common symbols are called archetypes.
- Understand narrative structure through reading and analyzing myths.

Why / Purpose / Connection:
Students in the 6th Grade will:

- Focus on Egypt during their studies of ancient civilizations.
- Understand the role that geography has played in the development of Egyptian culture.
- Understand that myths often explained events in the natural world that science could not.
- Study myths of creation and hero myths that illustrate the impact storytelling can have on the development of a society.

Materials / Resources / Readings:

- The myth of Sunjata - http://ias.berkeley.edu/orias/hero/sunjata/
- Joseph Campbell's The Hero with a Thousand Faces
- Construction Paper, magazines, comic books, newspapers, markers and scissors
- Chart Paper

Do Now:

- On a board or an overhead projector, write the focus question, "What is a hero?"
- Give each table markers and a piece of chart paper. Students are asked to accomplish two things: Define the word hero and list as many people—fictional or real—that they would categorize as heroic (10 minutes).
- Each group will tape their chart paper responses to the board or wall. One group at a time will share their responses with the class, directly referring to their charts.

Mini-lesson

- From the list the groups compiled, each group selects one hero with whom all group members are familiar.
- Groups will be completing a collage focused on the heroism of the person they selected. One member of each group puts the name of their chosen hero in the center of a piece of construction paper or a photo of the person with the name as a caption
- Use a collage model that the students can use as their guide. Give students the directions and questions for the assignment (attached I). Students put their own creative spin on this assignment and should not simply copy the model.
- For example, students can design a 3 dimensional collage, a collage as a web page or use alternative, recycled materials for construction. Give students 10 – 15 minutes to answer the collage questions about their hero. Model for students how the questions can be answered on the collage with images, cartoons, photos, captions, words and phrases. Students will be completing this part of the assignment the next day and they will have to bring in at least ten things from their homes to add to the collage.

Share/Closure:

Final 10 minutes of class, students clear everything from their desks except for their collage questions. Students share their work with the class. Teacher is prepared to ask challenging follow-up questions that utilize Bloom's Taxonomy:

- People sometimes say "He/she is a born leader…" does the same apply to heroes? Are heroes born or molded by their environment and challenges?
- What influence do heroes have over other people in a given society?
- What is an unsung hero?
- Why are hero stories from various parts of the world often similar?
- What was the catalyst for your hero's heroism?
- To whom would you compare this hero and why?
- Have you ever been put in a situation where you had an opportunity to be heroic? How did you face the challenge?
- What is often risked when making heroic actions?

Homework:

- Bring in at least ten items to add to your group's collage: articles, photos, illustrations, cartoons, comics, found objects, newspaper clippings, headlines, magazines, etc.
- Read the myth of Sunjata and answer the "Story Analysis" questions (attached II).

Next Steps:

- Students will construct their collages in class.

- Final collages will be displayed in class or on bulletin boards and students will conduct a gallery walk. They will view and critique all displays. Keep the hero collages displayed in class so that students are provided with inspiration for the rest of the unit.
- Students interview family members about their heroes.
- Students read additional myths, based on individual interests, to support their projects.

Other Notes/Comments:

Field Trip: Research whether there are performances of myths taking place in venues that are convenient and affordable.

School to Home Connection:

Students share their collages with family members.

Students engage family members in a discussion of heroes. Who are their heroes? Why?

Name _____ Date _____

Hero Collage

Creating Images from Questions

Directions: Answer the questions below and use your responses as a guide for finding words, phrases and images that illustrate why the person you selected is a hero. Use the internet, magazines, comic books and newspapers as sources for your collage.

1) What makes this person a hero? What special qualities does this person have?

2) What do you know about this hero's birth or childhood?

3) Is this person real, fictional, a superhero or unsung hero?

4) Does this hero have a flaw or weakness?

5) What challenges has this person overcome on his/her path to heroism?

6) To whom might this hero be compared?

Name: _____ Date: _____

Story Analysis

1. Title_____

2. Author_____

3. Protagonist (Hero or Heroine)_____

4. Protagonist's Character Traits (What is he/she like? Instead of general descriptions like "nice" and "bad", use words that really describe the character, like "hardworking" or "disrespectful." Avoid physical traits like "fat" or "ugly".)

_____

_____

_____

_____

_____

5. Setting (Where and when does the story take place?)_____

_____

_____

_____

6. Plotline (No more than 5 sentences) _____

_____

_____

_____

_____

_____

7. Central Problem (What does the protagonist face? What is the main conflict?)

_____

_____

_____

_____

_____

_____

8. Obstacles (What challenges, characters, events, or traits must the protagonist face and overcome in the story? What roadblocks prevent him or her from reaching his/her goal? Be specific.)

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

9. Solution to Problem (How does the protagonist solve the problem?)

_____

_____

_____

_____

10. Theme (What is the author's message or universal truth?) _____

_____

_____

Lesson Plan

Social Studies & English Language Arts

This Lesson Plan covers two or three days.

Unit of Study / Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Question: What is a mythological Archetype?

Blog Resource: www.magicofmyth.wordpress.com

Students will:

- Learn that mythological archetypes have been used by storytellers, authors and film makers throughout history.
- Understand that hero stories are common to almost every culture and that they often share similar motifs.
- Engage in a cross-cultural study of hero myths, movies and archetypes.
- Understand how narrative structure can be manipulated to create an engaging story.

Why / Purpose / Connection:
Students in the 6th Grade will:

- Investigate the role mythology played in the lives of people living millennia ago.
- Explore the Hero Archetype through active reading.
- Understand the importance of structure in creating a well-told story.
- Understand that archetypal structures aided story-tellers in societies that depended on an oral tradition.
- Use the hero archetype as a structure for writing original mythological stories.

Materials / Resources / Readings:

- The myth of Sunjata
- The myth of Isis and Osiris
- The movie "Whale Rider"
- The movie "Happy Gilmore"
- The movie "Spider Man"
- Special Birth Graphic Organizer
- computers, tv/vcr, LCD projector
- www.magicofmyth.wordpress.com

Mini-lesson:

Day One

- Write the following on the board:
  1) What hero movies have you seen?
  2) What do the heroes in these movies have in common?
- Students write quietly at their tables for about 10 minutes before engaging in a pair and share.
- A few students share with the class what they and their partners wrote about
- Give students the "Myth and the Movies" graphic organizer (attached II) and read the directions aloud. They will be watching each clip to recognize stages in the hero's journey. Students fill in the graphic organizer as they watch each clip.
- Pass out 4 different color post-it notes for each table. Each different color post-it corresponds to a different writing prompt (below) on the board. Students respond to the prompts on a piece of lined paper. Students, at the end of the class, will share their beginnings with a partner. Use an overhead projector and transparencies to model writing prompts. Engage students with questions while the model is on the overhead so they understand expectations. Ask students to come up and use the overhead markers to annotate the piece of writing for the class as you ask them questions.

  Example questions:
  - On what stage in the hero's journey does this piece of writing focus? How do you know?
  - What is the point of view of this piece of writing? How do you know?
  - Where is the setting in this piece? Is the setting well written? Why or why not? Why is the setting often at the beginning of a scene?
  - Is the dialogue formatted correctly? Is it apparent who is speaking throughout the dialogue? Is the dialogue interesting?
  - Is the writing as interesting as the action of the movie? How could the writing be improved?

1) Pink post-it: Pick one of the clips we watched and write an alternative scene on the post-it that both corresponds to the stage in the hero's journey that the clip illustrated and includes setting, action and dialogue

2) Blue post-it: Turn one of the clips we watched into a written scene. Try to include as much of the setting, action and dialogue of the scene into your writing as possible

3) White post-it: Pick a clip we watched in class and write the scene from the point of view of a secondary character or antagonist in the scene (write in the third person). Incorporate the thoughts and actions of this character and show how the character reacts to the problem in the scene

4) Yellow post-it: Pick one of the clips we watched in class and writing from the point of view of the main character in the scene (write in the first person voice), focus on how the character reacts to the problem with interior thoughts and action.

Day Two:

- Today is a writing day. Students should have their "Myth and the Movies" graphic organizer, and the writing they began on the previous day. They should clear everything else from their desks.
- To set the mood for the class period, ask a few of the students who produced exemplary beginnings in the previous class period to read their beginnings aloud. Ask the class the following questions:
  1) What did these writers do well?
  2) What setting, dialogue or action details did you like best in these beginnings?
  3) Was there a mood set at the beginning of these pieces? How was mood developed?
- After a quick 10 minutes of sharing and accountable talk, the students have the remainder of the period to write.
- Students will have the opportunity to share their edited writing in a gallery setting at the end of the week.

What is a **Writer's Gallery**? In a Writer's Gallery students clear everything from their tables except for a piece of writing they would like to share with their peers and a sheet of paper for feedback. Students circulate about the room, read each other's writing and leave detailed positive comments for each other. Students are given specific goals for this activity. For example, in 20 minutes you should read at least 3 pieces and leave a paragraph of feedback for each. Feedback should include a direct quote from the piece of writing and comments on that quote. Model a feedback sheet/comments on an overhead transparency sheet for students to ensure success with the Writer's Gallery.

Assessment:

- Individual: Teacher will read and grade the graphic organizers completed by students. This will enable the teacher to identify those students who are having trouble understanding the concept of archetype and how it relates to mythology and story-telling.
- Group: Students will give each other feedback to their post-it prompt writing in an open gallery setting through the feedback/comments sheets.

Next Steps:

Students will be given the opportunity to write their own hero myths using the archetype studied in class. To differentiate this lesson, students will have various options for how they approach the assignment. They can create a piece of short fiction, a script to be performed inside of class, record a script for DVD presentation, or a cartoon.

Notes on Archetypes

Carl Jung first applied the term archetype to literature. He recognized that there were universal patterns in all stories and mythologies regardless of culture or historical period and hypothesized that part of the human mind contained a collective unconscious shared by all members of the human species, a sort of universal, primal memory. Joseph Campbell took Jung's ideas and applied them to world mythologies. In A Hero with a Thousand Faces, among other works, he refined the concept of hero and the hero's journey. George Lucas used Campbell's writings to formulate the Star Wars saga.

Archetypes can be expressed in

- Myths
- Dreams
- Literature
- Religions
- Artwork
- Music
- Fantasies

Heroic Archetypes:

1. Hero as warrior (Odysseus): A near god-like hero faces physical challenges and external enemies
2. Hero as lover (Prince Charming): A pure love motivates the hero to complete his quest
3. Hero as Scapegoat (Harry Potter): Hero suffers for the sake of others
4. Transcendent Hero: The hero of tragedy whose fatal flaw brings about his downfall, but not without achieving some kind of transforming realization or wisdom (Greek and Shakespearean tragedies—Oedipus, Hamlet, etc.)
5. Romantic/Gothic Hero: Hero/lover with a decidedly dark side (Mr. Rochester in Jane Eyre, Edward in Twilight)
6. Proto-Feminist Hero: Female heroes (Mulan, Charlotte in Charlotte's Web)
7. Apocalyptic Hero: Hero who faces the possible destruction of society (Neo in "The Matrix," Captain Hiller in "Independence Day")
8. Anti-Hero: A non-hero, often a failure, frequently humorous (Homer Simpson)
9. Defiant Anti-hero: Opposes society's definition of heroism/goodness. (Robin Hood, the Grinch)
10. Unbalanced Hero: The protagonist who has (or must pretend to have) mental or emotional deficiencies (Hamlet, The Comedian in Watchmen)
11. The Other—the Denied Hero: The protagonist whose low status or essential otherness makes heroism possible (Invisible Man by Ralph Ellison, Neville in the later Harry Potter books)
12. The Superhero: Exaggerates normal patterns of human ability and potential; frequently has divine or supernatural origins. In some sense, the superhero is one apart, someone who does not quite belong, but who is nonetheless needed by society. (Mythological heroes, Superman)

Types of Archetypal Journeys

1. The quest for identity
2. The epic journey to find the promised land/to find the special city
3. The quest for vengeance
4. The warrior's journey to save his people

5. The search for love (to rescue the princess/damsel in distress)
6. The journey in search of knowledge
7. The tragic quest: in search of penance (forgiveness) or self-denial
8. The fool's errand
9. The quest to rid the land of danger
10. The grail quest (the quest for human perfection)

Stages of a Hero's Journey

Stage 1: Departure: The hero is called to adventure, although he is reluctant to accept.

Stage 2: Initiation: The hero crosses a threshold into a new, more dangerous world, gaining a more mature perspective.

Stage 3: The Road of Trials: The hero is given supernatural aid, endures tests of strength, resourcefulness, and endurance.

Stage 4: The Innermost Cave: The hero descends into the innermost cave, an underworld, or some other place of great trial. Sometimes this place can be within the hero's own mind. Because of this trial, the hero is reborn in some way—physically, emotionally, or spiritually. Through this experience, the hero changes internally.

Stage 5: Return and Reintegration with Society: The hero uses his new wisdom to restore fertility and order to the land

Characteristics of the Hero's Journey

- The hero is naïve and inexperienced
- The hero meets monsters or monstrous people
- The hero has a strange, wise being as a mentor
- The hero/heroine yearns for the beautiful lady/man who is sometimes his/her guide or inspiration
- The hero must go on a journey, learn a lesson, change in some way, and return home
- The hero often crosses a body of water or travels on a bridge.
- The hero is born and raised in a rural setting away from cities
- The origin of the hero is mysterious or the hero losses his/her parents at a young age, being raised by animals or a wise guardian
- The hero returns to the land of his/her birth in disguise or as an unknown
- The hero is special, one of a kind. He/she might represent a whole nation or culture
- The hero struggles for something valuable and important
- The hero has help from divine or supernatural forces
- The hero has a guide or guides
- The hero goes through a rite of passage or initiation, an event that marks a change from an immature to a more mature understanding of the world
- The hero undergoes some type of ritual or ceremony after his/her initiation
- The hero has a loyal band of companions
- The hero makes a stirring speech to his/her companions
- The hero engages in tests or contests of strength (physical and/or mental) and shows pride in his/her excellence
- The hero suffers an unhealable wound, sometimes an emotional or spiritual wound from which the hero never completely recovers.

Myth and the Movies
The Hero's Adventure

Stage in the hero's journey	Happy Gilmore	Spiderman	Frodo Baggins
Special Birth / Call to Adventure			
Mentor			
Trials or Challenges			

Writers Gallery
Response Sheet

In an effort to create a sustainable community of writers, it is necessary for us to share our work, receive feedback from multiple sources and talk! On this gallery response sheet, please leave positive and specific feedback for the author. In order to do this, put portions of the author's writing within quotation marks before commenting. Keep your comments focused and clear.

Excerpt from Alice in Wonderland
By Lewis Carroll

Directions: Read the following excerpt from Alice in Wonderland . Then read the feedback model on the next page to see how a direct quote can be used to give specific feedback.

The Caterpillar and Alice looked at each other for a time in silence: at last the Caterpillar took the hookah out of its mouth, and addressed her in a languid, sleepy voice.

"Who are *you*?" said the Caterpillar.

This was not an encouraging opening for a conversation. Alice replied, rather shyly, " I-- I hardly know, Sir, just at present—at least I know who I *was* when I got up this morning, but I think I must have been changed several times since then."

"What do you mean by that?" said the Caterpillar, sternly.

"I can't explain myself, I'm afraid, Sir," said Alice, "because I'm not myself, you see."

" I don't see," said the Caterpillar.

"I'm afraid I can't put it more clearly," Alice replied, very politely, "for I can't understand it myself, to begin with; and being so many different sizes in a day is very confusing."

Writers Gallery
Response Sheet

In an effort to create a sustainable community of writers, it is necessary for us to share our work, receive feedback from multiple sources and talk! On this gallery response sheet please leave positive and specific feedback for the author. In order to do this, put portions of the author's writing within quotation marks before commenting. Keep your comments focused and clear.

Lewis,
I loved the humor in this piece. Alice's words have two meanings. She knows who she was, what kind of person she was, when she woke up today, but she also doesn't know who she is because she keeps changing (growing, shrinking, etc.). I also like your use of adjectives, like languid: good word!

Lesson Plan

Social Studies & English Language Arts

Unit of Study / Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Questions: What is a hero? Who were the Egyptian leaders Hatshepsut and Imhotep? What made them heroic?

Teaching Points:
Students will:

- Recognize that Hatshepsut and Imhotep had unusual character traits that made rising to power a great challenge
- Understand that Hero stories are common to almost every culture and that they often share similar motifs
- Practice using research, reading and observation to inform the writing of fiction

Why / Purpose / Connection:
Students in the 6th Grade will:

- Focus on Egypt and the role geography has played in the development of Egyptian culture.
- Understand that hero myths and stories inspire all people to reach beyond what they believe are their own capacities for achievement.
- Study the impact that heroes can have on the development of a society.

Materials / Resources / Readings:

- Joseph Campbell's The Hero with a Thousand Faces
- Wikipedia
- http://www.metmuseum.org/explore/newegypt/htm/v_hatshe.htm
- http://www.bediz.com/hatshep/poetry.html
- http://www.ees.ac.uk/library-archive/library.htm

Do Now:

How can research help you write a more interesting story?

- Students respond to the "Do Now" question above in their notebooks. The response should take 5 minutes at the beginning of class
- Students do a pair/share. Ask a few students to share their responses with the class
- Students should understand that research enables a fiction writer to make a story more realistic and believable. Stories can contain facts woven throughout fictional text such as Literary Non Fiction or Historical Fiction. (Model with a historical fiction book from earlier in the year that the children all know, using the overhead projector and a small portion of the text.)

Mini-lesson

Day One

- In a computer lab or with laptops in the classroom, students will research two figures that were heroic in ancient Egypt—the female Pharoah, Hatshepsut, and the ancient Egyptian Scholar and Priest, Imhotep. Students will use their research to aid them in constructing a hero myth for either figure.
- To engage students' prior knowledge, ask them what characteristics of the Hero's Journey they should include in their notes.
- Students should recognize that they should be looking for a special birth or strange circumstances in the childhood of Hatshepsut or Imhotep that contributed to either figure becoming a hero.
- Instruct students in note-taking in the style of a Harvard Outline:
  Topic:

  Purpose (thesis) statement:
  I.
  A.
  1.
  a.
  II.
  A
  B.
  1.
  2.
  a.

  Model the research and note-taking process on an overhead transparency, Smart Board or other device that allows you to share this process with the entire class.
- Clarify your expectations and how to use the outline. Post a list of web resources on a chart for the students to browse while starting their research and note-taking. Set a goal for how much they should accomplish by the end of the period.

Homework:

- Students should compare and contrast the writing style and tone of the story of Hatshepsut on <http://www.bediz.com/hatshep/poetry.html> with the story of Sunjata, <http://ias.berkeley.edu/orias/hero/sunjata/> that they previously read. Students should notice that one has the tone of an entry in an encyclopedia while the other has the tone of an exciting piece of fiction. Students should note that purpose and audience often dictate the style in which an author will write.

Next Steps:

- Students will organize into collaborative groups and each group member will be responsible for writing one stage in their group's hero myth. Students will have the following options for the writing of their myth: a short fiction story with illustrations, a script to be performed, or a human comic.

School to Home Connection:

Students share their hero myths with family members.

Families write their own hero myths using a shared writing technique, wherein family members contribute their own lines to a story. The shared writing becomes one big story.

Unit Vocabulary Words

Egyptian Social Structure	Pharaoh
Vizier	Priest
Slaves	Monarch
Polytheistic (Osiris, Isis, Ra and Anubis)	Dynasty
Canopic jar	Amulet
Tomb	Sarcophagus
Mummy	Mummification
Dehydration	Preservation
Nilometer	Quern
Mattox	Flail
Shadoof	Domestication of animals
Papyrus	Archeologist
Artifacts	Carbon 14 dating
Nile River	Sahara Dessert
Delta	Oasis
Cataract	Irrigation
Mediterranean Sea	Oasis
Lower and upper Egypt	Kemet
Shaduf	Anno domino
Religion	Monotheistic
Caliph	Muslim/Islamic
Christian Orthodox	Egyptian Jews
Arabic	Republic/Government
Ottoman Empire occupation	French occupation
British occupation	Colony
Colonialism	Invade
Conquest	Multiculturalism
Diversity	Myth
	Archetype

Characteristics of the Hero's Journey- A Checklist

Directions: Put a check next to each characteristic that applies to the protagonist in the movie you're watching. Add up the number of checks you have at the end of the movie to rate your archetypal hero.

- ☐The hero is naïve and inexperienced ___
- ☐The hero meets monsters or monstrous men ____
- ☐The hero has a strange, wise being as a mentor ____
- ☐The hero/heroine yearns for the beautiful lady/man who is sometimes his/her guide or inspiration ____
- ☐The hero must go on a journey, learn a lesson, change in some way, and return home ____
- ☐The hero often crosses a body of water or travels on a bridge ____
- ☐The hero is born and raised in a rural setting away from cities ____
- ☐The origin of the hero is mysterious or the hero losses his/her parents at a young age, being raised by animals or a wise guardian ____
- ☐The hero returns to the land of his/her birth in disguise or as an unknown ____
- ☐The hero is special, one of a kind. He/she might represent a whole nation or culture ____
- ☐The hero struggles for something valuable and important ____
- ☐The hero has help from divine or supernatural forces ____
- ☐The hero has a guide or guides ____
- ☐The hero goes through a rite of passage or initiation, an event that marks a change from an immature to a more mature understanding of the world ____
- ☐The hero undergoes some type of ritual or ceremony after his/her initiation ____
- ☐The hero has a loyal band of companions ____
- ☐The hero makes a stirring speech to his/her companions _____
- ☐The hero engages in tests or contests of strength (physical and/or mental) and shows pride in his/her excellence ____
- ☐The hero suffers an unhealable wound, sometimes an emotional or spiritual wound from which the hero never completely recovers. _____

Lesson Plan

Science

Unit of Study/Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Question: What is mummification?

Students will:

- Hypothesize what environmental factors will affect preservation and mummification.
- Understand the process and significance of mummification.
- Investigate how temperature and amount of salt relate to the process of mummification. They will set an experiment on how Ancient Egyptians used drying as one step in the mummification relationship of variables in the process of mummification.
- Identify health and environmental issues on mummification. process and an experiment on which amount of salt is best to mummify an apple slice.

Why/Purpose/Connection:

Students in 6th grade will be:

- Introduced to the process of preservation and mummification.
- Learn what environmental factors affect the process of mummification
- Develop research and investigatory skills.

Materials/resources/Readings:

- Copy of the Article: "In the Valley of the Mummies, Revelations of a Golden Past" from http://www.nytimes.com
- Video clip and virtual Field Trip from : http://videos.howstuffworks.com/hsw/8293-forensic-detectives-the-meaning-of-mummification-video.htm and http://www.ancientegypt.co.uk/mummies/explore/main.html
- Metropolitan Museum of Art
- Worksheets for the Experiment
- Materials Required for the experiment:

Experiment A: <u>Amount of Salt and Mummification</u>

2 cups table salt, ½ apple (3 pieces), 3 popsicle or craft sticks, 3 medium-sized plastic bags that seal, 1 ½ cup sodium carbonate, and 1 ½ cup baking soda

Experiment B: <u>Type of Salt and Mummification</u>

2 fresh apples cut into quarters, approximately 2 cups table salt, approximately 2 cups Epsom salts, approximately 2 cups baking soda, 8 12-oz styrofoam or plastic cups, measuring cup, small bowl, spoon, permanent marker, and beam balance

Mini-Lesson (Model/Demonstration):

- Observe mummies on a field trip to the Metropolitan Museum of Art. Students write their observations and answer some questions in their journal notebooks. What is a mummy? What countries use mummification? Why do they do that? Does mummification still exist today in countries where it existed before? Why and why not? What materials are needed for mummification? What are the factors that affect mummification? How do scientists determine the age of a mummy? What modern processes are similar to mummification?
- If a field trip is not an option, then students can watch a video clip on mummification. The following website can be used for viewing: http://videos.howstuffworks.com/hsw/8293-forensic-detectives-the-meaning-of-mummification-video.htm. Students can also be engaged with a virtual field trip through this website: http://www.ancientegypt.co.uk/mummies/explore/main.html
- Students share their journal answers to the questions and identify the countries that use mummification.
- Explain the environmental conditions or factors that would affect drying out of the body.
- Locate Egypt on a world map or globe. Question what the environmental conditions are in this part of the world, and why so many mummies and tombs might be found there.
- Question what they observed from dried fruits or preserved fruits. Explain that water is taken out of the body for preservation. Question what materials are used as preservatives.
- Explain dependent, independent, and controlled variables involved in doing an experiment.

Student Exploration/Practice:

- Students organize into their assigned groups. Review roles and responsibilities of group members as established in previous lessons.
- Students will be investigating how the amount of salt and the type of salt substances affect the mummification process.
    - Since there are two factors (the amount of salt and the type of salt substances) to be investigated, the group will choose one.
    - As a class, identify the dependent, independent, and controlled variables for each investigation.
    - Introduce to the class what materials they will be using.
    - Inform the students that they can use specimen other than apples for their "mummy" (meat, beef, other fruits or vegetable).

- Students formulate and write the problem for the investigation. The problem could be: "Does the amount of salt affect the process of mummification? How does the type of salt substances affect the process of mummification?" or anything similar.
- Students write their hypothesis about their problem in a science journal or lab notebook. If students do not have science lab notebooks, they can complete the worksheet (attached). Hand out worksheets to the group.
- Students will continue writing their observations while working cooperatively for one week. Observations maybe extended to two weeks.

Share/Closure:

- Students present the results of their investigation.
    - Explain the process of mummification
    - Explain the variables involved in their experiment and their relationship
    - State a conclusion based on the data collected.

A Gallery walk can be done or simply call the reporter of each group to present. Encourage all students to ask questions about the investigation.

Assessment:

- Individual Assessment: Teacher will assess learning by observing each student's performance during the lab activity and by reading students' reflections.
- Group assessment: Teacher will assess learning by the completed lab reports of each group.

Homework:

Answer the following questions in your science or other journal:

What is the significance of mummification?
Is the process of mummification the same as the process of preservation today?
How is mummification done today?
What machines or technology used today in the process of preservation or mummification?

Next Steps/Extension Activities

- Students revise their lab reports for final submission.
- Students research and analyze the health and environmental issues on mummification as a reference for further investigation.
- Students write their reflections in their journal notebooks about the process of mummification and its usefulness to the modern world.

- Students read the article “In the Valley of the Mummies, revelations of the Golden Past” by John Noble Wilford. (from www.nytimes.com).
- Students answer the following questions:
  - ✓ What great archeological find was recently unearthed in Egypt, and why is this such an exciting find?
  - ✓ The fifth paragraph notes that some of the mummies found "were wrapped in plain linen, but many were decorated with gilded masks and painted scenes on cartonage."
  - ✓ Why might people be buried with such different coverings?
  - ✓ What items other than mummies were found in the Valley of the Golden Mummies?
  - ✓ What evidence of the crossing of Roman and Egyptian cultures exists on some of the mummies?
  - ✓ What do scientists hope to learn about the society in which these mummified people lived?
  - ✓ Why don't many of these types of sites appear to be this complete when scientists find them?
  - ✓ What do scientists hope to learn about the physiology of these mummified people, and why is this important knowledge?
  - ✓ What is notable about the architecture of the tombs?
  - ✓ What are the four general types of the mummies found in the tomb, and what do these different coverings say about these mummified people?

Other Notes/Comments

In the 'Valley of the Mummies,' Revelations of a Golden Past
By John Noble Wilford

At an oasis 230 miles southwest of Cairo, people in Roman times lived well on the wealth they accumulated making wine from dates and grapes. And in death, their bodies were prepared well for the afterlife, mummified and fitted with elaborate masks and waistcoats covered in gold.

A vivid record of affluence, art and religion in Roman Egypt has been preserved in a large 2,000-year-old cemetery at the Bahariya Oasis, which came to light three years ago -- literally by accident. A donkey being ridden on a dusty road stumbled, and its leg slipped into an opening to one of the many tombs buried there under sand and rock.

After intensive excavations this year, Egyptian archeologists have disclosed the first details of what they say is one of the most spectacular discoveries in Egypt in recent decades. Detailed pictures of the tombs and mummies are being published this week in Archaeology, the magazine of the Archaeological Institute of America.

"Never before have such a number of mummies been found in a single site in Egypt," Dr. Zahi Hawass, director of the Bahariya excavations, said in an interview last week. He is Egypt's Under Secretary of State for the Giza monuments, the pyramids near Cairo.

In the four tombs so far explored, archeologists counted 105 mummies of men, women and children. Entire families appeared to be together in repose. Some of the bodies were wrapped in plain linen, but many were decorated with gilded masks and painted scenes on cartonage, which is the pasteboard made of linen and papyrus that served as mummy cases. No two mummy decorations were alike.

Dr. Hawass said the cemetery site included many more multichambered tombs and extended over more than two square miles. He estimated that as many as 10,000 mummies might be uncovered at what is being called the Valley of the Golden Mummies.

Writing in Archaeology, Dr. Hawass described his first impressions of the rows of mummies, many of them surrounded by pottery, amulets and other grave goods. "I could not believe that such beautiful specimens existed," he said. "The eyes of some gazed at me as if they were alive."

His own eyes were drawn to the mummy of a woman, about five feet tall, adorned with a crown with four decorative rows of red curls and a gilded mask that extended over the chest to two circular disks representing breasts. The decorations incorporated images of cobras and the children of gods.

"While the hairstyle was clearly Roman, reminiscent of terra cotta statues of the period," Dr. Hawass wrote, "the iconography of her mask, painted with deities that protected the deceased and ease her passage into the afterlife, was pure Egyptian."

The team of archeologists said the mummies were remarkably well preserved, with the smell of embalming resin still strong in the tombs. But it appeared that the Romanized Egyptians applied less effort on preparing the mummified body itself and more on exterior decorations. The discovery provided new evidence that funerary practices from the last thousand or so

years of the pharaohs had continued well into the second century A.D. The Roman rule of Egypt began shortly before the birth of Christ.

The art of mummy paintings, masks and other decorations in Roman Egypt has been familiar to scholars for more than a century. In 1888, the British archeologist William Flinders Petrie found gilded masks at a Roman-period cemetery. "Ancient Faces: Mummy Portraits from Roman Egypt," a recent book published by the British Museum in London, described the practice as being "derived from pharaonic traditions of belief, in which the mask served as a substitute for the head of the deceased, endowing the individual with the attributes of deities and thereby assisting his or her passage to the afterlife."

But Egyptologists and other scholars said the new find promised to yield important insights into the lives of affluent Romanized Egyptians, their religious beliefs and funerary traditions.

"It's going to be very exciting," Dr. Roger Bagnall, a classics professor at Columbia University who specializes in Egypt's Roman period, said of the prospects for gaining a better understanding of Egyptian culture.

As beautiful and interesting as the gilded artifacts were, Dr. Bagnall said, he was more impressed by the sheer size and condition of the site.

"This may be the largest known cemetery in Egypt that hasn't been gotten to by plunderers before the archeologists," he said.

Even the most celebrated Egyptian discoveries of this century -- the tomb of King Tutankhamen, opened in the 1920's, and the tomb of the many sons of Ramses II, still being excavated -- were not pristine sites. Looters had left their destructive marks and made off with some of the artifacts. But no one seems to have touched the new-found Bahariya tombs, and no modern community has risen on the site to get in the way of excavations. For now, the tombs are closed to the public and under guard.

Using new tools for pathological examinations, scientists should be able to study the mummy skeletons for information on what the people ate, the diseases they suffered and the causes of their deaths.

The large number of mummies should provide better demographic data, including estimates on infant and child mortality and life expectancy.

The architecture of the Bahariya tombs also intrigued scholars. Dr. Hawass said the four explored tombs, cut into sandstone bedrock, have somewhat distinctive styles, but have similar passages and chambers. The entrance of a typical tomb was a hall about eight feet long. This led to a "room of handing-over," where the family would have delivered the mummy for transfer from the world of the living to that of the dead.

Beyond that were the burial chambers carved from sandstone.

The tombs generally had two chambers, each with several smaller rooms where the mummies were laid out. One tomb had catacomblike burial rooms, one above the other.

The entrance to one tomb was flanked by images of Anubis, the god of embalming. Dr. Hawass said it was the first time he had seen this.

Though the mummies date to the first and second centuries A.D., Dr. Hawass said the site was probably a burial place from the time Alexander the Great was in Egypt, in 322 B.C. A Hellenistic temple stands near the cemetery.

Egyptian archeologists described four general types of mummies found at Bahariya. About 60 mummies excavated so far wear the gilded masks. A second type is characterized by the head-to-waist cartonage, which depicts scenes of various gods such as Isis, Osiris and Toth, who sat in judgment of the deceased. A third type of mummy has no decoration but is resting in a human-shaped pottery coffin. Another type is covered entirely in linen, much as the mummies were in the time of the pharaohs.

Dr. Bagnall of Columbia looked forward to comparing the new discoveries with the mummies French archeologists have excavated in recent decades at Douch, a former Roman military post 120 miles west of Luxor on the Nile River. The funerary practices seem to be similar, he said, but the Bahareya cemetery apparently holds a much richer treasure of mummies.

Egyptian archeologists plan to resume excavations there in November. It may take them a decade to explore the entire cemetery and assemble a clear picture of how the affluent classes of Roman Egypt lived and died.

Mummification

Problem:

_____
_____
_____

Hypothesis:

_____
_____
_____

Materials:

Procedure:

1. Make three types of Natron solution in a plastic bag.
   1st Bag: 1 cup table salt, ½ cup sodium carbonate, ½ cup baking soda
   2nd Bag: ½ cup table salt, ½ cup sodium carbonate, ½ cup baking soda
   3rd Bag: ¼ cup table salt, ½ cup sodium carbonate, ½ cup baking soda

2. Carve a face into each piece of an apple with the popsicle stick then stick the popsicle stick into the apple so you have a handle (like you were making a candy apple).

3. Dip each piece into the Natron solution until the face is covered, and leave the apple in the bag.

   Safety Precaution: do NOT eat the apple or the Natron solution; wash your hands after the activity and don't touch your eyes or mouth until you wash your hands. You might want to wear plastic goggles.

4. Leave the bag open in an upright position to allow air to flow.

5. Record your observations as our apple mummifies. What happens to the apple once it is covered with the Natron solution? How much time does it take for the apple to turn into a "mummy"?

Observation:

Days	Bag 1	Bag 2	Bag 3
Day 1			
Mass (g)			
Length (cm)			
Other Observation			
Day 2			
Mass (g)			
Length (cm)			
Other Observation			
Day 3			
Mass (g)			
Length (cm)			
Other Observation			
Day 4			
Mass (g)			
Length (cm)			
Other Observation			
Day 5			
Mass (g)			
Length (cm)			
Other Observation			

Analysis:

1. What are the variables involved in your investigation?
   Dependent variable?
   Independent variable?
   Controlled variables?

2. What happens to the apple once it is covered with the Natron solution?

3. How much does it take for each apple to turn into a "mummy"?

4. In which bag does the apple turn into a mummy faster?

5. Does the amount of salt affect the mummification process? Explain.

Name: _____ Date: _____

Class: _____ Teacher: _____

Mummification

Problem:

_____

_____

Hypothesis:

_____

_____

Materials:

Procedure:

One person from each group will pick up a tray of the materials needed for the investigation.

1. Number the side of each cup (one to eight) and write the initials of the group members underneath this number. This is very important so that you will be able to accurately track the desiccation, or removal of water, of each of your apple slices. Then, you should put one apple slice in each cup.

2. Create a chart in your lab notebook or journal that will be used to track the changing weight of the apple slices on a daily basis (look at the sample chart on the board). You should create six columns across and nine rows down. The top row should be several lines in height, as you will be writing some information here. In the first block in the chart (upper left corner), you should write Cups. You should number the leftmost column with the numbers 1 to 8 (representing the eight cups), leaving ample room under each number for further writing. In the top blocks, you will write the dates that you will be checking you apples' weights (the first block should be today's date, the next tomorrow's date, etc., remembering to omit the week-end days).

3. Weigh each slice carefully and write down the starting weight of each slice in the appropriate box on the chart. The weight of the apple in cup 1 is written in the Cup 1 box for today's date on the chart, the weight of the apple in cup 2 is written in the Cup 2 box for today's date, and so on.

4. Add exactly 1/2 cup of baking soda to cup 1, making sure to completely cover the apple. Write the words "baking soda only" on the chart under the words "Cup 1." Fill cup 2 with 1/2 cup Epsom salts, and write "Epsom salts only" on the chart under "Cup 2." Fill cup 3 with 1/2 cup table salt, and write "table salt only" on the chart under "Cup 3."

5. The next four cups will be filled with mixtures of salts, and you should mix their measurements in the bowl provided before pouring the mixtures into the cups to ensure an even mix for each cup. Fill cup 4 with 1/4 cup Epsom and 1/4 cup table salts, and write "half Epsom, half table

salt" under "Cup 4." Fill cup 5 with 1/4 cup table salt and 1/4 cup baking soda, and write "half table salt, half baking soda" under "Cup 5." Fill cup 6 with 1/4 cup baking soda and 1/4 cup Epsom salt, and write "half baking soda, half Epsom" under "Cup 6. Fill cup 7 with 1/3 cup baking soda, 1/3 cup Epsom salts, and 1/3 cup table salt, and write "third of each" under "Cup 7." Leave cup 8 alone as a control, and write "control" under "Cup 8."

6. One student from each group should give the teacher all of the materials except for the scale, the tray and the cups with the mixtures and the apples in them. Place all of your cups and the scale on your tray and puts these materials on a shelf out of direct sunlight.
   With the day's portion of the lab complete, you should develop a hypothesis for which apple slice you think will be most mummified after two weeks given the salt mixture it is in and why.
7. Complete your Table of Observations. Answer the questions and write your conclusion.
8. Prepare for presentation.

Cups	Date				
1					
2					
3					
4					
5					
6					
7					
8					

Observation Sheet:

Analysis:

1. What are the variables in your investigation?

2. Which is the dependent variable?
   Which is the independent variable?
   Which is/are the controlled variable (s)?

3. In which cup did you observe the most changes occurring?

4. How would you relate the changes that occurred in each cup to the type of salt solution?

5. Does the type of salt substances affect the process of mummification? Explain.

Lesson Plan

Social Studies & Science

Unit of Study/Theme: Egypt

Essential Question: How does geography influence the development of a civilization?

Focus Question: What are the different types of biomes?

Students will:

- Define and determine the characteristics of a biome.
- Classify the types of biomes that exist around the world.
- Identify the biotic factors (living things-flora and fauna) and abiotic factors (nonliving things-climate) in each biome.
- Investigate, in small groups, the locations, characteristics, and natural and human dangers to an aquatic and desert biome (Egypt), tropical grassland (savanna) biome, temperate grassland biome, tropical forest biome, and other biomes found in Africa and other parts of the world
- Create illustrated classroom posters dedicated to their biomes that incorporate all of the information gained through research or build a terrarium representing a desert biome, an aquatic biome (Nile River) and other biomes found in Africa and other parts of the world.
- Explore the relationship between daily life and the environment, examining the effects of the disruption of expected environmental patterns such as rainfall and temperature, by reading and discussing "Gomitogo Journal: Undependable Rains Bring Seasonal Exodus".

Why/Purpose/Connection:

Students in the 6th Grade will:

- Be introduced to the concept of the world's biomes.
- Determine the characteristics of each biome in the world and the factors that might affect the balance of each biome.
- Enhance their knowledge on the adaptation and survival of the Egyptian or African people as it relates to the type of biome in which they live.

Materials/Resources/Readings:

- Worksheets: Our Biome Worksheet, Biome Observation Worksheet, What is a Terrarium Worksheet, and Biome Maps
- Websites:

http://www.fairchildgarden.org/uploads/docs/Eduacation/teacher%

20training/plant%20kingdom/Terrarium%20Activity.pdf

http://www.forgefx.com/casestudies/prenticehall/ph/biomes/biomes.htm

http://ecology.botany.ufl.edu/2005introecology/Downloads/Lectures/Lecture6Biomes.ppt#271,1,Slide1

http://people.hofstra.edu/qeotrans/gotmaps/maps/MapAfricaBiomes.pdf

http://www.nytimes.com

- Glencoe New York Science (6th Grade)
- Terrarium Materials:
  - Clear glass or plastic container
  - Small stones
  - Activated Charcoal (from aquarium or orchid supply store)
  - Sphagnum moss (optional)
  - Potting soil
  -Plants
  -Decorative Objects

Other materials: markers, chart paper, glue, scissors, biome charts, pictures of biomes, and article: "Undependable Rains Bring Seasonal Exodus".

Mini-Lesson (Model/Demonstration):

- Bring the class to a Field Trip to American Museum of Natural History to observe different ecosystems. During the trip, ask the students to observe and write their observations in their science journal or lab notebook. In their observations, they should include the type of plants, animals, the soil, and the climate in each ecosystem. Encourage the students to draw what they observe. You may use the worksheet (following the lesson) for the students to complete during the trip.

- If Field Trip is not an option, engage the students by using pictures of different biomes (without any written description, just the name of the biome). Let the students go to their regular group. Inform them that each will have a picture of a biome. Give each group one picture of a biome. Ask the students to look the picture and ask them the following questions: What types of plants grow in this biome? What kind of animals do you think live in this biome? If you live in this place, how many seasons will you experience? What types of clothes will you wear? Why do you think so? Is it hot here? Is it cold here? Let them predict or infer. Let them write their responses in their science journal or lab notebook.

- Ask each group to share their responses. Write their responses on a chart posted on the board Based on their responses, ask each group to operationally define a biome. This chart can be revisited after the lesson.

- As a class, develop a general definition of "biome". Explain the difference between biotic and abiotic factors in a biome.

Student Exploration/Practice:

- Each group prepares for their tasks. Review member responsibilities in a small group working situation. Tasks: Investigate biotic and abiotic characteristics of biomes, locations of biomes, and natural and human dangers to biomes. Build a model biome.

- Show the Biomes of the World map and using the same picture of a biome assigned to each group and other available materials and resources, ask the students the following:

  - ✓ Where does your biome exist on Earth? Give each group a photocopied map and a marker or colored pencil to shade in their biome.

  - ✓ Describe the characteristics of the biome such as: the temperature, amount of moisture or other climatic factors, the plants, and the animals. The students may write their information on a chart or use the worksheets in the Teacher Resources Section.

  - ✓ Students research how the people who live in that particular biome adapt to their environment (e.g. their clothing, their food, their buildings or shelter).

  - ✓ What natural dangers to this biome exist? What human dangers to this biome exist? What examples can you find of both natural and human dangers that have impacted this biome?

  - ✓ How do you think your biome is affected by the growth and perpetuation of industrialization? Does this affect the culture of people? Does this relate to the issue on climatic changes all over the world?

- Ask each group to summarize the information about their biome on chart paper for presentation. They can include any pictures, charts, or diagrams that they have used.

- Plan a biome project. Provide a planning guide worksheet included in this lesson plan. Constructing a biome may take up to a week.

Share/Closure:

Each group presents their biome. Encourage questions and note taking in their science journals.

- ✓ How are the biomes different from each other?

- ✓ How have the Egyptian people adapted to their environment? (Or people who live in Africa, Brazil, Canada, or North America.)

- ✓ How do the biotic and abiotic factors relate to each in a particular biome?

- ✓ Predict what kind of biome they currently live in or the biome where they were born.

Assessment:

- Group Assessment: Teacher will assess learning by evaluating the completed projects on biome, poster or collage, and booklets. Students complete a self assessment checklist on their completed project.

- Individual assessment: Teacher will assess learning by listening during the sharing and presentation sessions, observing individual performances during the group activity, and by reading students' reflections or their journal notebooks.

- Students share their reflections with the class.

Homework:

How do climatic factors affect natural and physical processes? For example: evaporation, drying, condensation, precipitation.
How does temperature affect the process of preservation? Mummification?
Research other processes that might be influenced by temperature or other climatic factors.

Next Steps/ Extension Activities:

- Groups create a book of their biomes to display in the class as a reference for other students who might have questions about their biome.
- Each group builds a desert, aquatic model (modeling the Nile River), tropical rainforest, tundra, temperate rainforest, or grassland terrarium. These biomes are all found in Africa. Each group will build one biome. These biomes can be built using natural or manmade materials.
- Students complete a research paper about biomes that can be found in their own country and the environmental issues or problems that are affecting them.
- Students write a reflection of their learning about the different biomes in their science journals. Encourage the students to think of questions about biomes to use as a reference for further investigation.
- Students research different natural processes such as evaporation, condensation, precipitation, and the water cycle. Their biome models/projects be used to investigate and learn about these processes.
- Students may create a collage of their biomes or other biomes in which they are interested. They may create a graphical concept map on the different biomes. They can make an illustrated classroom poster dedicated to their biome.
- Students read the article "Undependable Rains Bring Seasonal Exodus" by Norimitsu Onishi and ask the following questions: (This article is from the New York Times)
  - ✓ Why did the people of Gomitogo, Mali leave their country this year? Where did they go?
  - ✓ In what ways is West Africa's agriculture dependent upon the expected seasonal rains?
  - ✓ What is the history behind the "seasonal exodus of the "able-bodied"?
  - ✓ What are the causes and effects of desertification?
  - ✓ What is causing the droughts in Mali?
  - ✓ What is the purpose of the association of villages discussed in the article? How do their goals relate to the droughts?
  - ✓ How are the village association and CARE attempting to bring water to areas affected by drought, and what have been the effects of these efforts?
  - ✓ Why is it important to note in this article that "because of their remoteness, the villages have changed little during the lives of the men and women there now"?

- ✓ Why do you think that the chief of Kossouma expressed that "some questions about history are unimportant"? What "questions of history" are discussed near the end of the article that illustrate this sentiment? How does this relate to the article as a whole?

Other Notes/Comments

Undependable Rains Bring Seasonal Exodus *By NORIMITSU ONISHI*

GOMITOGO, Mali -- Slumped in the shadow of a mud wall, any desire he might have had to stand up drained by the midday sun and the Ramadan fast, Mamadou Tombo explained the simple truth about his village of rice farmers. "When there was good flood and rain," said Mr. Tombo, the mayor, "there was no exodus." But the rains came late this year and brought a poor harvest. The rivers overflowed before much of the rice could germinate, setting many young people off to more fortunate parts of the Niger River basin. For centuries, the great Niger and Bani Rivers have flooded the flat stretch of West Africa at this time of year, turning scorched soil into fertile ground for a few months. Areas that could easily be crossed on foot or by donkey abruptly become inaccessible, except to pirogues, which slowly navigate the innumerable channels and creeks. And medieval villages like this one, built on plateaus in the basin and seemingly unchanged in centuries, become islands surrounded by water and rice paddies. From a distance, as the outline of their labyrinthine mud houses and castle like mosques becomes clearer against the vast blue sky, the villages look like Disneylands lost in the Niger basin.	NOTES

This one about nine miles west of the ancient town of Djenné is home to 3,000 peasants. In years of meager harvest, the population drops as villagers strike out to hunt for jobs in Bamako, the capital, or in more fertile corners of the basin.

That pattern -- what people here call the seasonal exodus of the able-bodied -- began with the droughts of the 1970's, which affected the entire north-central region of Africa south of the Sahara. As desertification forced nomads to the Saharan fringes north of here, the lack of rain in this region -- or disruption of the age-old cycle of rains and floods -- has changed the way the people live.

"Growing rice was very easy before the droughts," said Boukadari Diakité, one of the few men in the village who speaks French, as he sat a few feet from the mayor. "In the last two years we have had great floods because it rained in the south, but it did not rain early enough here. As long as we are not masters of nature, we will never be able to feel secure."

So only the old and the very young could be found in Gomitogo earlier in December. Donkeys meandered alone through the maze of dusty narrow alleys, braying occasionally, as women pounded rice, dull thuds resounding against the walls. The quiet was otherwise broken only by children reciting verses at Koranic school and the muezzin's calls to prayer.

In 1993 the heads of seven villages, including this one, gathered in a field and formed an association that eventually grouped 30 villages across 74,000 acres, said Mr. Tombo, who has served as the organization's president.

"The little rice we had grown was being threatened by the Peuls, who were letting their cattle graze in our areas," Mr. Tombo said, referring to the nomadic herdsmen with whom the rice farmers share a centuries-old rivalry and partnership that grew increasingly strained after the droughts.

"If we stopped them in one village," he said, "we know they would move to another village. But by uniting we felt we could chase them away."

The association also began digging channels to control the flow of water. The efforts intensified in the last year, when the aid group CARE built about $150,000 worth of dikes and canals in the region, said Boubacar Coulibaly, an official with CARE in Djenné.

While the organization was waiting to collect productivity results at the end of this season, Mr. Coulibaly said CARE's five-year goal was to help triple rice production in the area.

Because of their remoteness, the villages have changed little during the lives of the men and women there now. Far from lands where changes are measured in faster Pentium chips, people here note that at some point in the 20th century the production and weaving of cotton was largely abandoned in favor of ready-made cloth bought in Djenné. A primary school opened in 1962.

Gomitogo's population has grown faster than people's capacity to fill land on the plateau's edges and build houses, limited as they are by the mud bricks to one-story structures. But there is hope, Mr. Diakité said.

"When I was a boy," he explained, "I would go into the field and bring back mud in baskets on my head for landfill. Now we have oxen and carts."

There are no written records in Gomitogo, or in its neighboring villages, Soa and Kossouma, so questions about the history of the villages merely draw stares. But the villages are believed to have been founded around the time that Djenné came into existence in the 11th century.

For the chief of Kossouma, Djanguino Karankou, a cheerfully ebullient man who greeted a visitor to his island with endless welcomes, such questions about history are unimportant. Life is good here, he said. His only complaint was, naturally, that the rains had come too late this year.

"But we cannot blame God, because God decided so," Mr. Karankou said. His smile conveyed the belief that so long as faith remained strong and unquestioning, Kossouma would endure.

Even though the rains arrived late, the last two years brought floods of a magnitude unseen since the droughts of the 1970's, Mr. Karankou said.

"We hope that the floods and rains have returned and that they will stay," he said.

Even by the standards of Africa, arguably the continent least concerned with dates and time, the people in Kossouma showed little regard for such details. Asked how old he was, Mr. Karankou said 110, though he hardly looked older than 70.

He insisted. Some confirmed his age; others denied it. One man said with great authority that the chief was actually 85.

In Gomitogo -- which now boasts its 68th chief -- Mr. Karankou's claim drew smiles, the kind someone from a big city might bestow on someone from the country. "We know him," Mr. Diakité said. "He's not 110." "He's a contemporary of my father, in his 60's," Mr. Tombo said. "We're all in agreement on that," said another elder, Cissé Kampo, as the men sitting in the shade of the mud wall nodded. Asked his own age, Mr. Diakité said immediately that he was 44. But a look of doubt quickly spread across his face. His forehead wrinkled, he looked down at his hands and busily drew and withdrew his fingers. "I believe I made a mistake," said this lifelong resident of Gomitogo. "I'm 47. No, I was born in 1947. That's it. So I'm 52 -- 52 years old this year."	

Caring for your Terrarium

The two most important factors you must consider when caring for your terrarium are sunlight and water.

Sunlight: Place your terrarium in a bright area with indirect sunlight, such as a windowsill. Because the terrarium is a closed system, *it can get too hot if it is in direct sun and the plants may burn.*

Water: A properly maintained terrarium can go for weeks or months without needing water. As the terrarium heats up, water will be pulled up from the rocks and soil to the top of the container where it will form a mist and then drip back down to water the plants. You should be able to see some mist on the sides of the container as well as some fog inside; however, if the sides are constantly wet, and there is so much condensation that you cannot see your plants, then you will need to open the top of the container temporarily to allow it to dry.

Pruning: Plants may need to be pruned to keep them small enough to fit the container. You can do this with a pair of scissors.

FAIRCHILD TROPICAL BOTANIC GARDEN

Follow Up Activity with Terrariums

Objective: Students will record observations compare and contrast their observations with those of others. Students will be able to name and explain the stages of the water cycle.

Vocabulary:

Condensation
Ecosystem
Evaporation
Precipitation
Transpiration

Materials:

Individual terrariums
My Terrarium Journal" worksheet for each student
"The Water Cycle" worksheet for each student

Procedure:

Part I - Terrarium observation

1. After creating the terrariums, distribute the "My Terrarium Journal" handout for students to draw their observations. For the first week, students should observe their terrariums several times daily and record when the terrarium is cloudy, and when it is clear. Compare results with class.
2. Ask the students what they expect to happen to their terrariums. Record their predictions.
3. Two weeks later, students should again make observations and draw their terrarium in their journal. If time allows, continue bi-weekly observations.

As a class, you may test the effect of different variables on the terrariums such as temperature, light levels, or the effect of salt water. Have the students decide what question they would like to test, how to set up the experiment, and make predictions about what they expect to happen. Make observations every few days and compare results to the predictions.

Part II - The Water Cycle

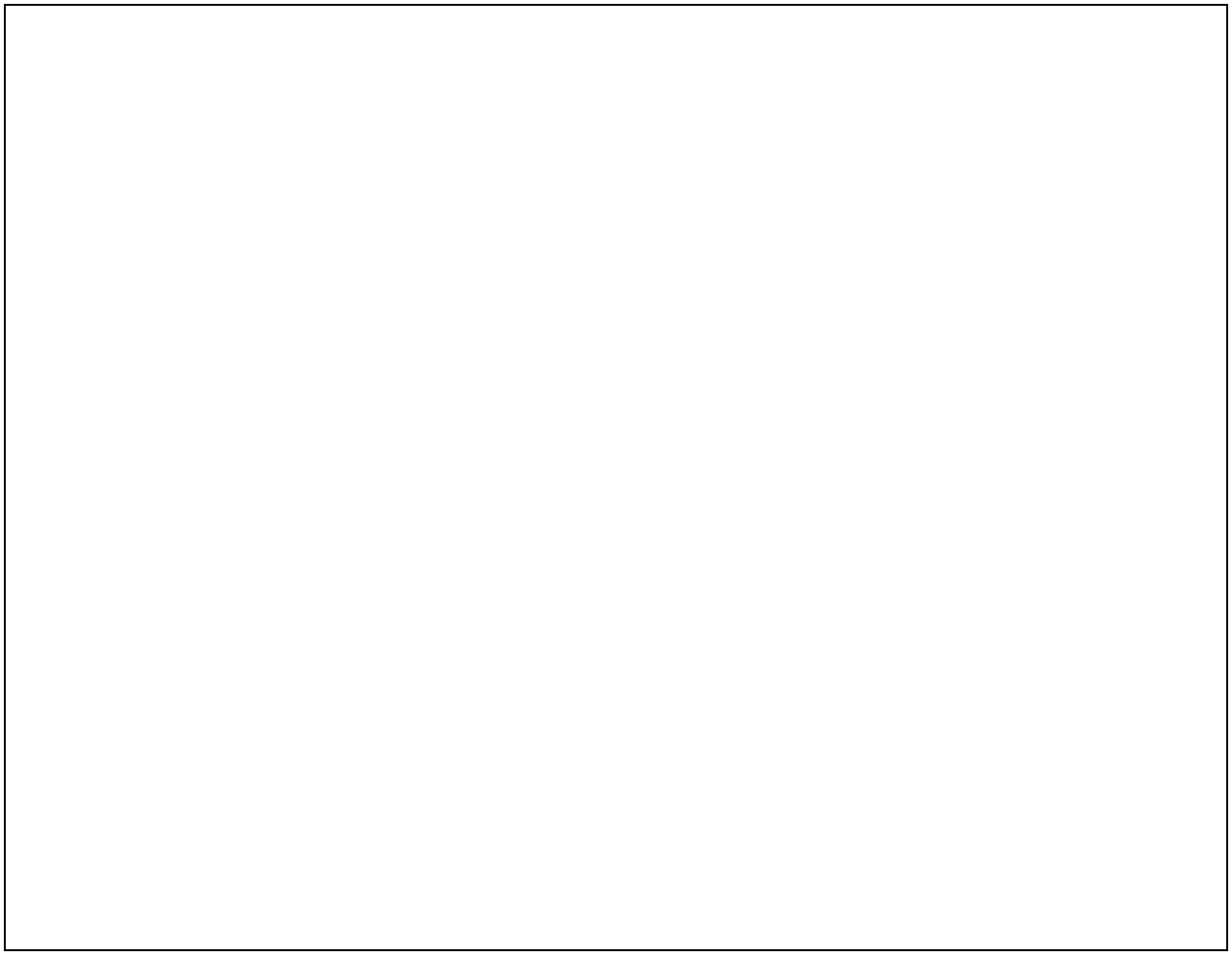
1. The terrariums can be used as models to understand the global water cycle. Organize the class into cooperative learning groups and give them the following questions to discuss:
   How is the terrarium like an ecosystem? In what ways is it different? What would happen if the top of the jar was removed? How is it possible that the terrarium may not require watering for years? How do the plants inside get the water they need to grow?
2. Discuss the circulation of the water within the terrariums. Draw a simple diagram of the water cycle on the board or use the diagram provided) and ask students to describe what is represented in the diagram.
3. As a class, you may review the 'What is the Water Cycle?' background information, then have students complete the 'Water Cycle' handout on their own.

Name_____

My Terrarium Journal Draw a picture of your terrarium Day 1 Date _____		**When is it:** **Cloudy**	**Clear**
	Day 1		
	Day 2		
	Day 3		
	Day 4		
	Day 5		
	Day 6		
	Day 7		

Draw a picture of your terrarium Day 14 (2 weeks later) Date_____	Describe any changes in your terrarium and the date you observed the change.

Fill in



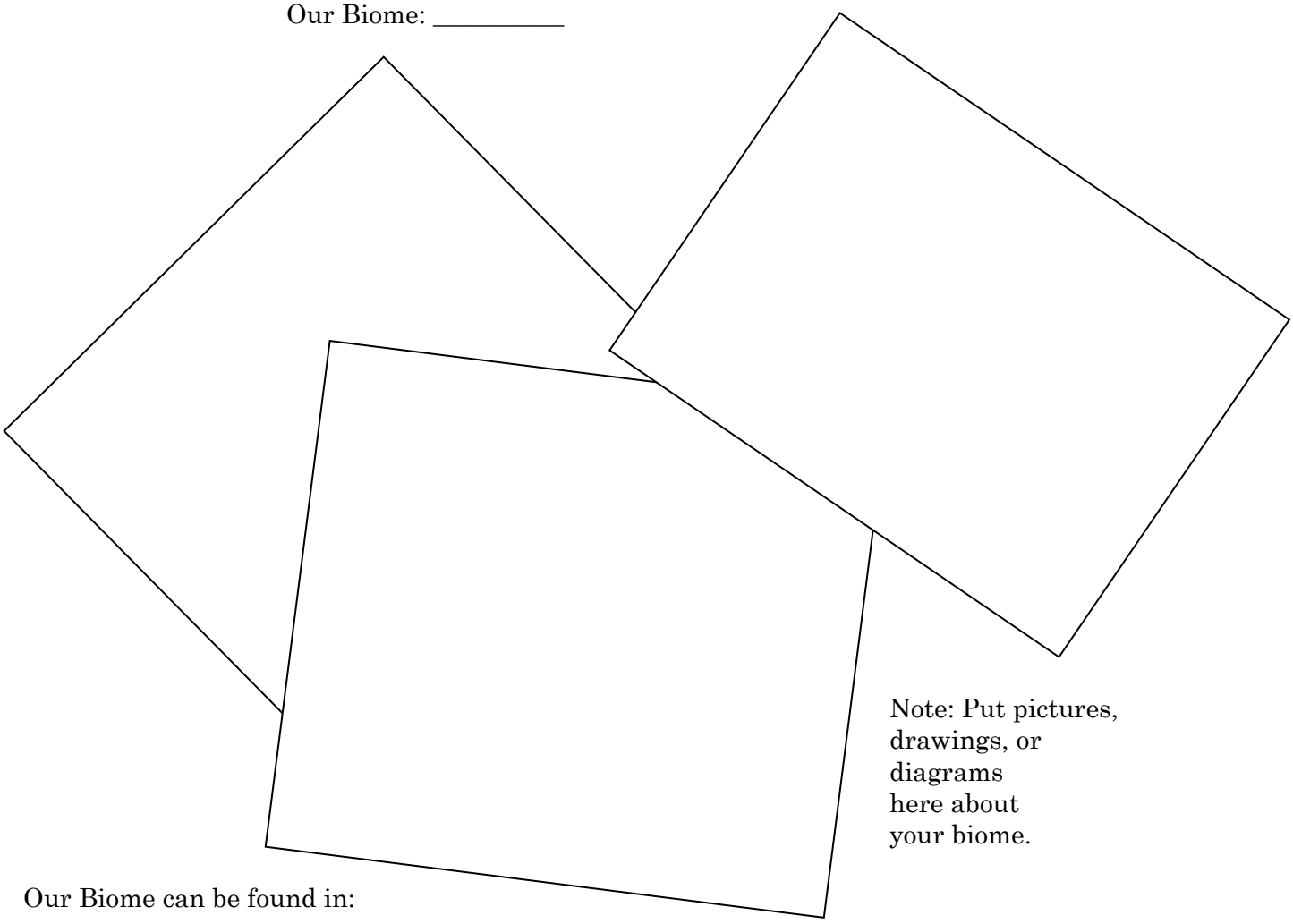
Note: This is a sample chart for student responses. This should be written on chart paper and posted on the board during the mini lesson.

BIOMES	Climate	Plants	Animals	Location
1				
2				
3				
4				
5				
6				

Name: _____ Date: _____

Group #: _____ Teacher: _____

Our Biome: _____



Note: Put pictures, drawings, or diagrams here about your biome.

Our Biome can be found in:

_____

_____

The animals that are usually found here are:

_____

_____

The plants that are usually found here are:

_____

_____

The climate here is:

_____

_____

How does your type of biome relate to the peoples' adaptation to their environment (their clothing, their food, their buildings and/or shelter, and others)?

What natural dangers threaten this biome? What human dangers exist? What examples can you find of both natural and human dangers that have had an impact on this biome?

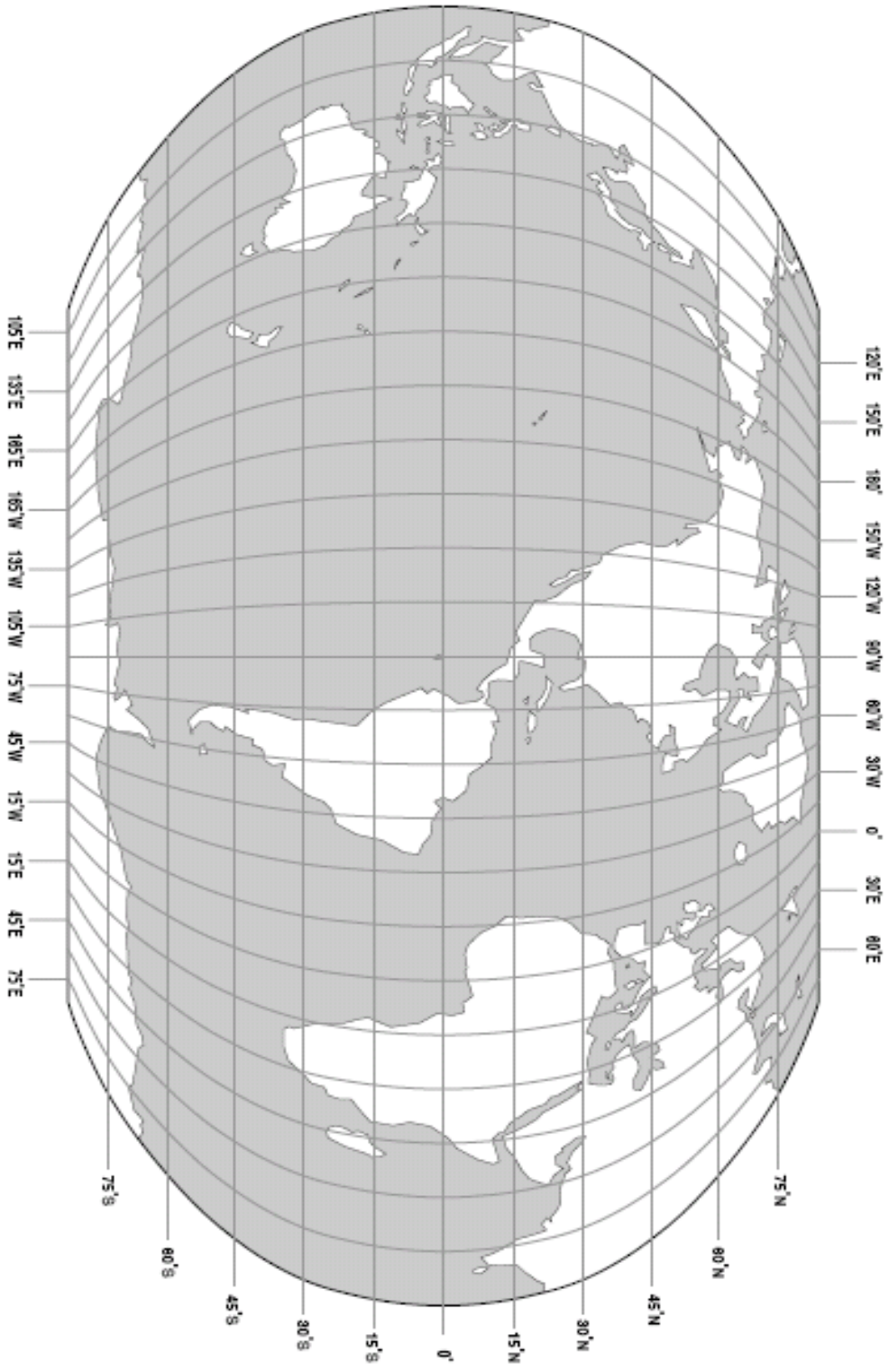
How do you think your biome is affected by growing industrialization? Does this affect the culture of the people in your biome? How does this relate to the issue on climatic changes all over the world?

What can someone your age do to help combat environmental problems that may endanger the biomes in your country?

Name: _____ Date: _____

Biome Worksheet

Biome Name:	
World Location:	
Climate (Average Annual Temperature, Seasonal Temperatures, and Precipitation):	
Other Environmental Factors (soil, tides, salinity, etc.):	
Plants: • • • •	**Adaptions to Environment** • • • •
Animals • • • •	**Adaptions to Environment** • • • •



Biome Map: Shade in where your Biome is located.

BUILDING A TERRARIUM

Suggested Final Project

By the end of this unit of study, students may build a terrarium representing different major biomes of Africa: desert, grassland (savanna), temperate forest, tropical forest, and aquatic.

- Students will brainstorm on specific criteria and constraints of their terrarium.
- Students will research on materials needed to build a terrarium.
- Students will explain how to take care of their terrarium.
- Students will build a terrarium representing their biome and showing the plants, animals, type of soil, and other climatic factors in a particular biome.
- Students will research the natural processes (evaporation, condensation, precipitation, transpiration, and/or water cycle) that exist in a biome. They will also explain the adaptation and survival of plants and animals in a biome.
- Students will write a one-page report of their biome to be displayed. The written report will be used during group presentations and/or gallery walk.

BUILDING A TERRARIUM RUBRIC

Teacher Name:
Student Name:_____ Reviewer Name_____
Date: _____

Project: Terrarium

Project: Terrarium

CATEGORY	RESPONSIBILITIES
Background Research	☐ I used a variety of helpful resources. ☐ I used information from textbooks. ☐ I used internet resources. ☐ I used only reliable resources. ☐ I used resources that listed facts. ☐ I collected enough information to get a good understanding of my topic. ☐ I wrote down where I got each piece of information. ☐ I correctly cited all resources used in the final project.
Cooperative Work	☐ I worked well with my group members. ☐ I showed respect and support for fellow team members. ☐ I listened to my group's ideas. ☐ I did my share of the work. ☐ I contributed both time and effort. ☐ I helped us succeed. ☐ My work made this project better.
Experimental Research	☐ I made a hypothesis. ☐ I gathered information.

- ☐ I thought of some things (variables) that could mess up my experiment.
- ☐ I tried to control things (variables) that could mess up my experiment.
- ☐ I summarized the results and told what they meant.
- ☐ I displayed my project neatly.
- ☐ I made an attractive display for my project.

Relating Concepts

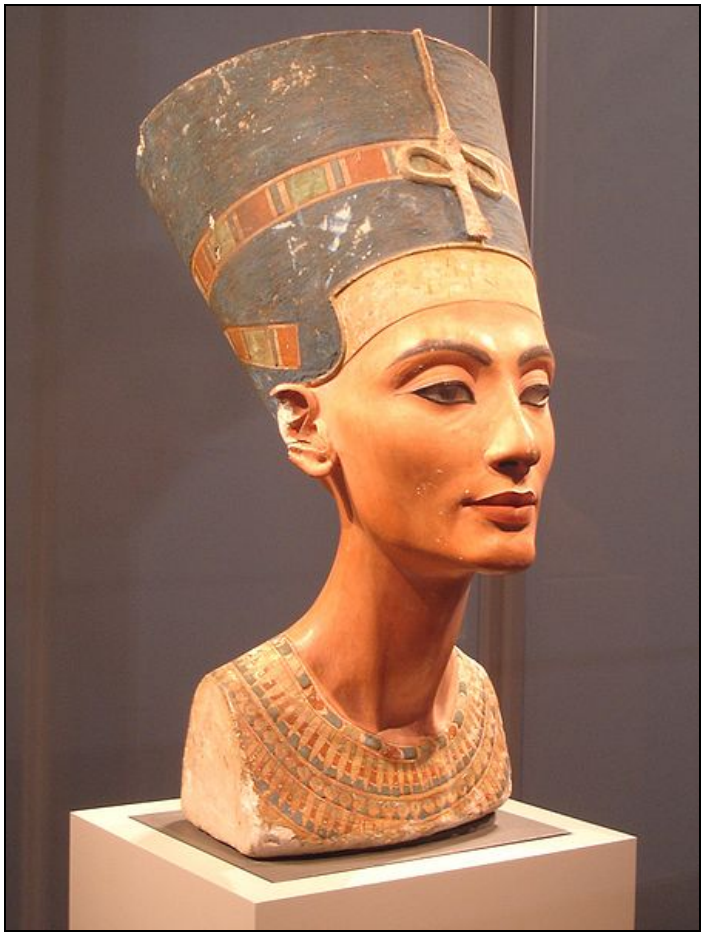
- ☐ I know how this project relates to what we are studying.
- ☐ I know how this project relates to history.
- ☐ I know how this project relates to math.
- ☐ I know how this project relates to music or art.
- ☐ I know how this project relates to our community.

Performance Criteria	4 (Exemplary)	3 (Proficient)	2 (Developing)	1 (Limited)
Group Process	Group members facilitate each others' participation and all participate in project work. Work is distributed and completed. Group uses members' strengths effectively. Group members resolve conflicts successfully.	Group members facilitate each others' participation and all participate in project work. Work is distributed and completed. Group uses members' strengths effectively but Group members did not resolve conflicts successfully.	Group members facilitate each others' participation but did not use each member's strengths. Work is not distributed properly.	Group members did not facilitate each others' participation. Work is not completed and the group members did not resolve conflicts successfully.
Final Project	All the components of a biome (plants, animals, climatic conditions) are properly represented in the terrarium.	All the components of a biome except one are represented in the terrarium.	Two major components of a biome are not represented properly.	The terrarium is not done.
Project Presentation	Uses visuals clearly and effectively. Communicates and stresses main points. Makes consistent eye contact. Enunciates clearly with appropriate volume. Answer all questions.	Uses visuals clearly and effectively. Communicates and stresses main points. Makes consistent eye contact. Enunciates clearly with appropriate volume but did not answer all questions.	Uses visuals clearly and effectively. Communicates and stresses main points. Did not make consistent eye contact and did not answer all questions.	Visuals are not clear. Did not stress main points.

VOCABULARY WORDS

Week 1	Week 2
Geography Biogeography Climatology Coastal Geography Landscape Geography Hydrology Human Geography Physical Geography Topographic Map	Climatic Zones Polar Temperate Arid Tropical Mediterranean Mountain Coniferous
Week 3	Week 4
Biodiversity Biomes Biotic factors Abiotic Factors Adaptation Tundra Rainforest Desert Terrarium	Biodiversity Biomes Biotic factors Abiotic Factors Adaptation Tundra Rainforest Desert Terrarium
Week 5	Week 6
Simple Machines Inclined Plane Lever Wedge Pulley Wheel & axle Screw Ancient Civilization	Mechanical Advantage Actual Mechanical Advantage Simple Machines Lever Screw Inclined Plane Wheel & Axle Wedge Pulley

TEACHER RESOURCES



Multiple Intelligence Checklist for Students

This checklist is a simple tool to help you consider student learning strengths based on the eight intelligences identified by Howard Gardner and originally described by Thomas Armstrong. Understanding the way a student prefers to learn is a critical step in selecting technology which matches the individual needs of the student.

Linguistic Intelligence (Word Smart)
___enjoys reading books
___has a good memory for names, places, lyrics or trivia
___appreciates nonsense rhymes, puns, tongue twisters
___enjoys listening to stories on tape, the radio, talking books
___likes word games, crossword puzzles
___has a good vocabulary for age
___writes better than average for age
___spells words accurately, or does developmental spelling advanced for age
___loves to tell stories, jokes, or spin tall tales
___enjoys going to libraries, bookstores
Other characteristics in this area:

Logical-Mathematical Intelligence (Number Smart)
___asks a lot of questions about how things work
___good at mental arithmetic, or has advanced math concepts for age
___likes math class, or enjoys counting and numbers
___has organized collections of cards, coins, insects
___enjoys logical puzzles, brain teasers, strategy games on or off the computer
___likes to experiment and test things out
___handles money matters well
___likes putting things in categories or hierarchies
___loves working on the computer, any technologies
___enjoys science fairs, electronic exhibits, trips to Radio Shack, math contests
Other characteristics in this area:

Spatial/Visual Intelligence (Picture Smart)
___Likes to draw, paint, and design things
___enjoys solving mazes, puzzles, "Where's Waldo?"
___prefers videos, slides, maps, charts, diagrams
___reacts strongly to colors (likes and dislikes)
___daydreams more than peers

___gets more out of pictures than words when reading
___doodles on notebook, worksheet, other paper
___wins easily at checkers, chess, battleship or other board games
___builds interesting 3D constructions for age, using Lego or wooden blocks
___enjoys going to planetariums, art shows
Other characteristics in this area:

Bodily-Kinesthetic Intelligence (Body Smart)
___excels in one or more sports
___moves, twitches, taps or fidgets while seated
___cleverly mimics other people's gestures or mannerisms
___loves to take things apart and put them together again
___has to put hands "all over" something new
___enjoys running, jumping, wrestling, and/or dancing
___has a dramatic way of expressing ideas, communicating
___show skill in crafts like woodworking, sewing, mechanics
___likes to work with clay or finger paint
___enjoys sporting events, hiking, acting, or role-playing
Other characteristics in this area:

Musical Intelligence (Music Smart)
___plays a musical instrument
___has a good singing voice
___remembers melodies of songs
___hums, whistles, or taps out rhythms unconsciously when reading, studying
___sensitive to environmental, non-verbal noises
___responds strongly to background music
___tells you when music is off-key or disturbing
___needs music to study, do homework, work
___has a rhythmic way of speaking, moving
___enjoys concerts, musicals
Other characteristics in this area:

Interpersonal Intelligence (People Smart)
___enjoys socializing with peers
___seems to be a natural leader
___gives advice to friends who have problems
___appears to be "street" smart
___joins clubs, committees, other organizations
___has a good sense of empathy and concern for others

___enjoy playing group games, team sports
___has several close friends
___prefers to work with someone else on a project or at the computer
___enjoys almost any activities which promote socialization

Other characteristics in this area:

Intrapersonal Intelligence (Self Smart)
___displays a sense of independence, or strong will
___has a realistic sense of own strengths and weaknesses
___prefers working alone to working with others
___marches to the beat of a different drummer
___has an interest or hobby which others do not know about
___expresses feelings accurately
___learns from own successes and failures in life
___enjoys independent study, self-paced instruction
___prefers to have own computer, game, book, ball
___has high self-esteem, self-motivation
Other characteristics in this area:

Natural Intelligence (Nature Smart)
___has one or more pets
___prefers to be outdoors
___monitors, predicts changes in the weather
___recognizes and knows names of flowers, trees, plants
___likes to feed and handle hamsters, birds, horses, snakes
___prefers stories about animals, natural phenomena (earthquakes, hurricanes)
___collects and categorizes leaves, butterflies, insects, rocks
___likes to garden, grow plants indoors
___likes to fish, hunt, camp, hike nature trails
___notices and recognizes animal tracks, nests, burrows
Other characteristics in this area:

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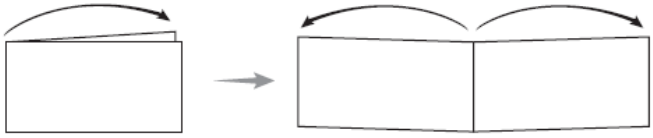
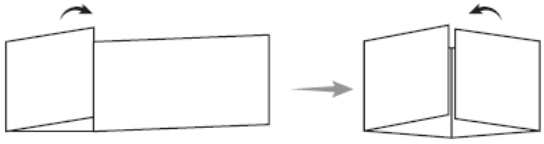
Accordion Book

Start with a long sheet of paper

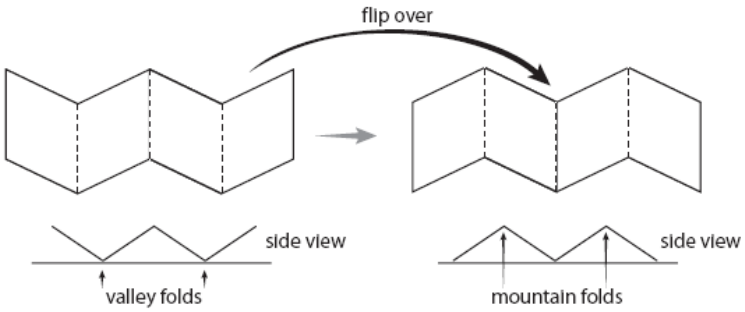


fold in half

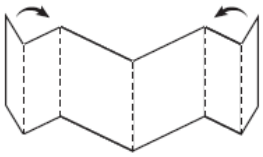
then open up

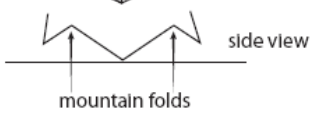


fold each end into middle

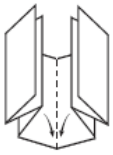


fold each end into first mountain fold

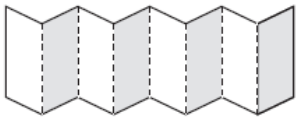




fold each mountain fold in to the center mountain fold: crease paper to make a fold in each middle page



open all folds



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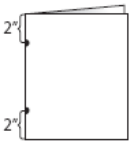
Rubber Band Journal

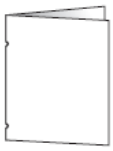
For the paper:

Fold each sheet of paper in half.



Mark the folded edge of the paper, 2″ from the top and 2″ from the bottom.

Repeat for each sheet of paper.

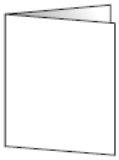


Using the marks as a guide, make two holes on the folded edge of the paper with a hole punch, or use scissors to cut two notches out of the folded edge.

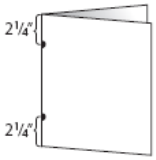
Repeat for each sheet of paper.

Nest papers inside each other, lining up the holes.

For the cover:



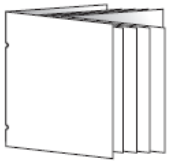
Fold the cover paper in half.



Mark the folded edge of the paper, 2¼″ from the top and 2¼″ from the bottom.

Using the marks as a guide, make two holes on the folded edge of the cover with a hole punch or cut two notches with scissors.

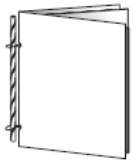
To assemble the book:



Place the nested paper inside the cover, lining up the holes.

Open the book, and thread a rubber band through the bottom hole, going from the inside of the book to the outside. Pull about ½″ of the rubber band through the hole.

Loop the end of the rubber band around the end of the stick



Thread the other end of the rubber band through the top hole, going from inside to outside, and loop it around the top of the stick.

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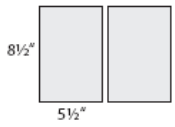
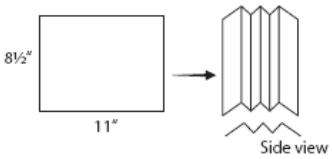
Flag Book

For the paper:

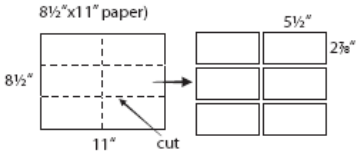
For the covers: two sheets of 8½" x 5½" paper (two pieces can be cut from one 8½"x11" paper)



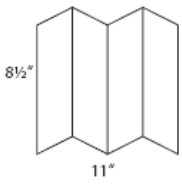
For the spine: one sheet of 8½" x 11" paper



For the flags: six sheets of 2⅜" x 5½" paper (six pieces can be cut from one 8½"x11" paper)

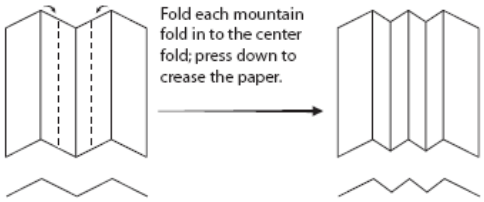


To make the spine:



Begin by folding the 8½" x 11" paper widthwise into a four page accordion.

Place the accordion facing down with the two mountain folds pointing up.

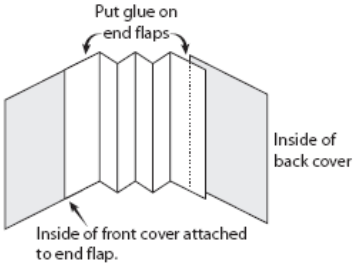


Fold each mountain fold in to the center fold; press down to crease the paper.

For directions on folding, refer to the Accordion Book instructions, completing the first four steps only.

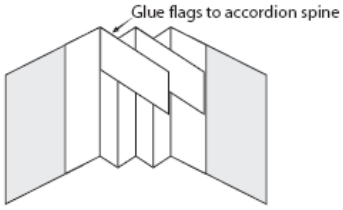
To attach the covers:

Glue the covers to the end flaps of the spine, with the end flaps on the inside of the covers.

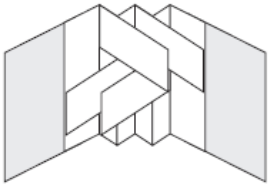


To attach the flags:

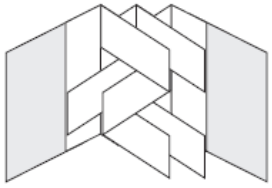
Glue the first row of two flags at the top of the spine, one flag on the left side of each fold.



Glue the second row of two flags in the middle of the spine, just below the first row, one flag on the right side of each fold.



Glue the third row of two flags at the bottom of the spine, just below the second row, one flag on the left side of each fold.



The flags on the top and bottom row will point to the right; the flags in the second row will point to the left.

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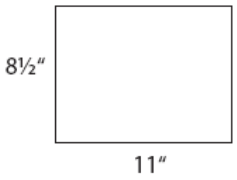
Pop-Up

For the paper:

One 8½"x11" sheet of paper



Fold paper in half widthwise.

Draw two parallel lines that are the same length (2" to 3") towards the folded edge of the paper.

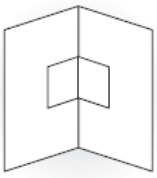
Cut along both lines starting at the folded edge.

Fold the cut flap towards you, and make a straight crease at the fold.

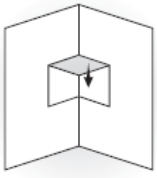
Then fold the flap back, away from you, and press the fold again.

Unfold the flap, putting it in its original position.

Open the paper like a tent,

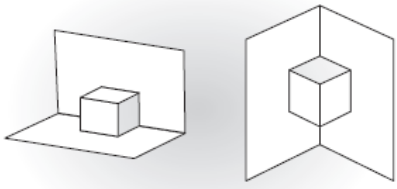


and push the flap through to the other side.



Close the paper in half and press the folds.

Open; the box pops up!



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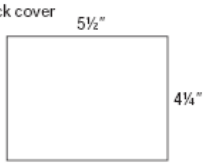
Tunnel Book

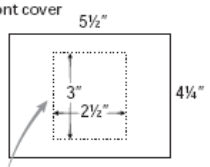
For the covers:

Cut two sheets of 4¼" x 5½" paper

Back cover



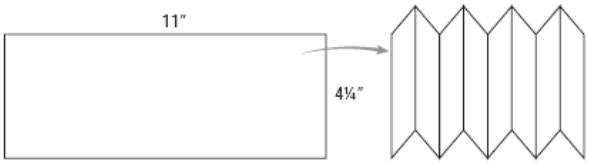
Front cover

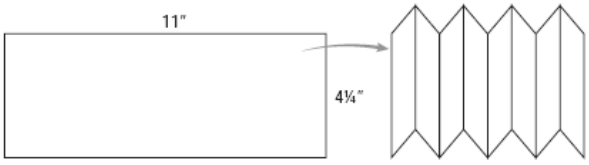


Cut a 3" x 2½" rectangle from the center of the front cover, leaving a 1½" border on the sides and a ½" border on the top and bottom.

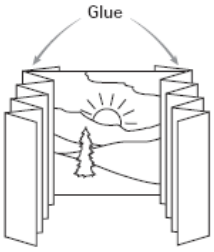
For the sides:

Cut two sheets of 4¼" x 11" paper



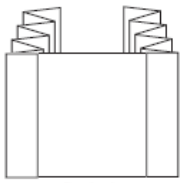


Fold each side into an 8-panel accordion. For directions on folding, refer to the Accordion Book instructions.



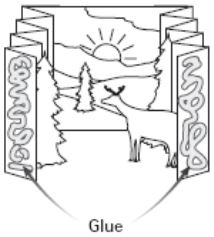
To assemble the book:

Glue the back cover to the accordion sides. Attach it to the front side of the last fold on each accordion side.

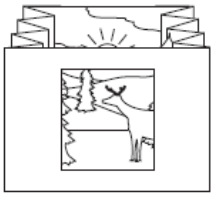


Back view

Glue cut-paper shape to the front sides of the accordion folds.



Glue the front cover to the accordion sides.



Attach it to the outside of the first fold on each accordion side.

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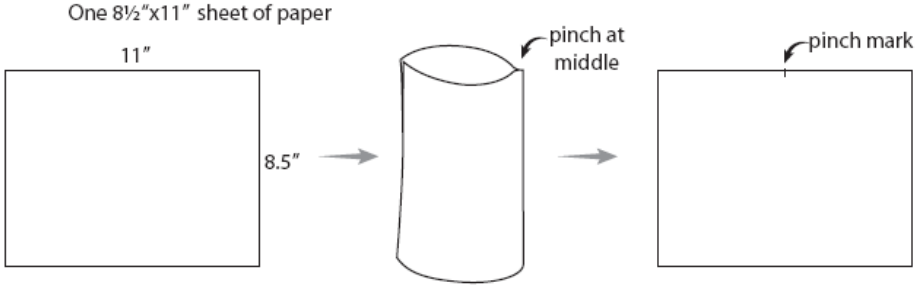
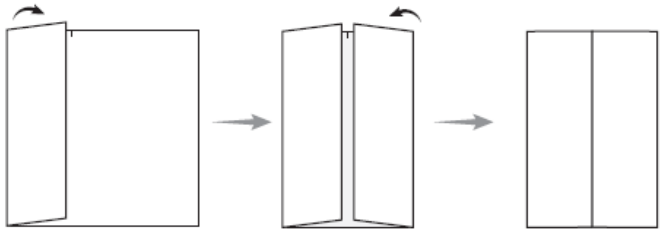
Self-portrait Book

For the paper:
One 8½"x11" sheet of paper

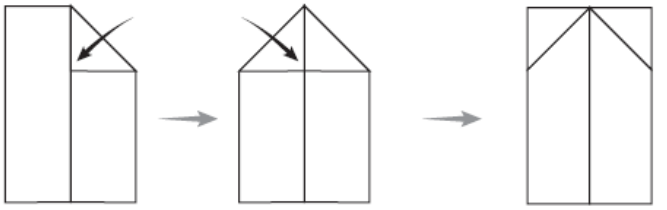


fold both sides to meet in middle

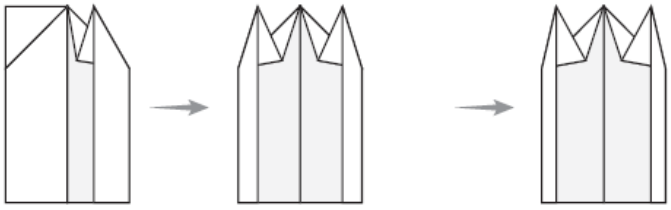


fold corners down to middle

unfold corners



reverse fold and tuck fold in on both sides



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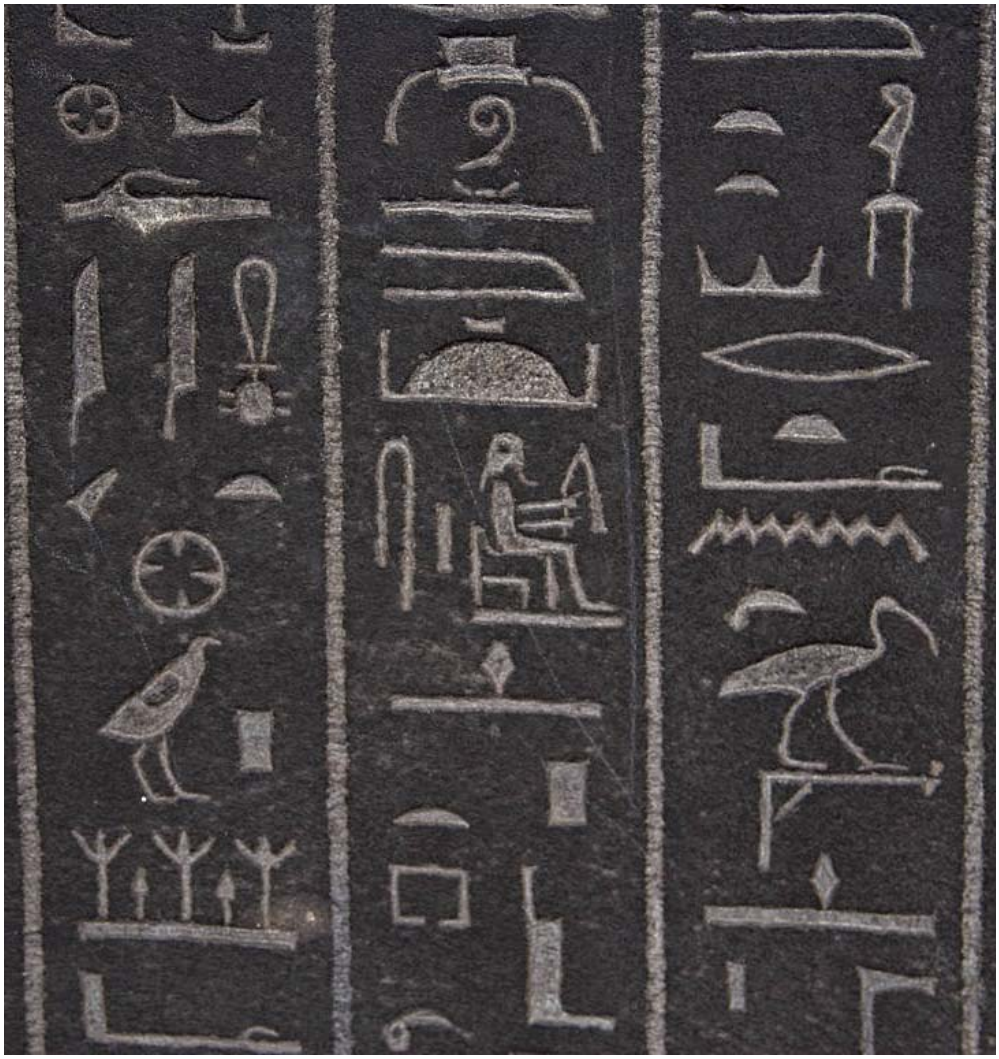
TEMPLATES



LESSON PLAN TEMPLATE

Unit of Study/Theme:

Essential Question:

Focus Question:

Teaching Points:

Why/Purpose/Connection:

Materials/Resources/Readings:

Mini-Lesson:

Student Exploration/Practice:

Share/Closure:

Next Steps:

School to Home Connection:

Other Notes/Comments:

Social Studies Unit Planning Guide

Unit:

Essential Question:

Core Vocabulary:

Focus Questions

-
-
-

Student Outcomes
Think about what you want the students to know and be able to do by the end of this unit.
Content, Process and Skills

Interdisciplinary Unit of Study
Planning Matrix Template

Unit of Study:
Essential Question:

Focus Questions **1.** **2.** **3.** **4.** **5.** **Content:** The student will: **Process:** The student will: **Attitudes and Attributes:** The student will:	**Disciplines**	**I.** Initial activities that introduce, build and engage students with content knowledge, concept, skill	**II.** Extension activities that challenge students to deepen their understanding through inquiry and application, analysis, synthesis, etc. of knowledge, concept, skill	**III.** Culminating activities for independent or small group investigations that allow students to create, share or extend knowledge while capitalizing on student interests	**Resources Needed**
	Literacy				
	Math/ Science				
	Social Studies				
	The Arts				
	Technology				

Focus Questions	**Disciplines**	**I.** Initial activities that introduce, build and engage students with content knowledge, concept, skill, etc.
Content: The student will: **Process:** The student will: **Attitudes and Attributes:** The student will: •	**Literacy**	▪
	Math/ Science	▪
	Social Studies	▪
	The Arts	▪
	Technology	▪

Unit of Study:
Essential Question:

Disciplines	**II.** Extension activities that challenge students to deepen their understanding through inquiry and application, analysis, synthesis, etc. of knowledge, concept, skill	**III.** Culminating activities for independent or small group investigations that allow students to create, share, or extend knowledge while capitalizing on student interests	**Resources Needed**
Literacy		▪	▪
Math/ Science	▪	▪	
Social Studies	▪	▪	
The Arts	▪	▪	
Technology	▪	•	

Interdisciplinary Unit of Study
Planning Matrix Template

Unit of Study:
Essential Question:

Focus Questions **1.** **2.** **3.** **4.** **5.** **Content:** The student will: **Process:** The student will: **Attitudes and Attributes:** The student will:	**Disciplines**	**I.** Initial activities that introduce, build and engage students with content knowledge, concept, skill	**II.** Extension activities that challenge students to deepen their understanding through inquiry and application, analysis, synthesis, etc. of knowledge, concept, skill	**III.** Culminating activities for independent or small group investigations that allow students to create, share or extend knowledge while capitalizing on student interests	**Resources Needed**
	Literacy				
	Math/ Science				
	Social Studies				
	The Arts				
	Technology				

PHOTO AND MAP RESOURCES

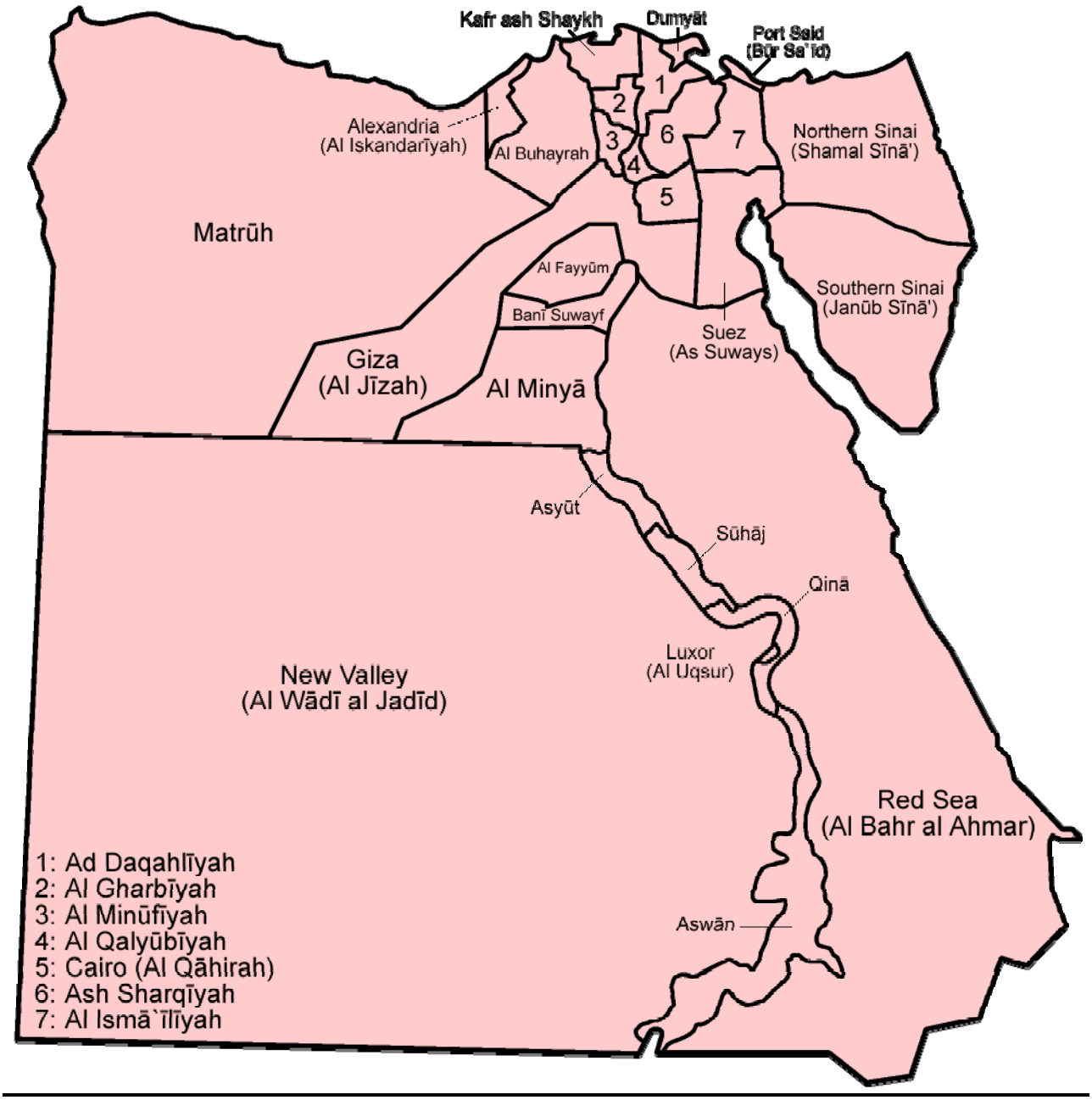
Flag of Egypt

http://www.mapsofworld.com/flags/egypt-flag.html

Map of Egypt and major cities

CIA World Factbook

Map of the Governorates of Egypt



Creative Commons: Golbez

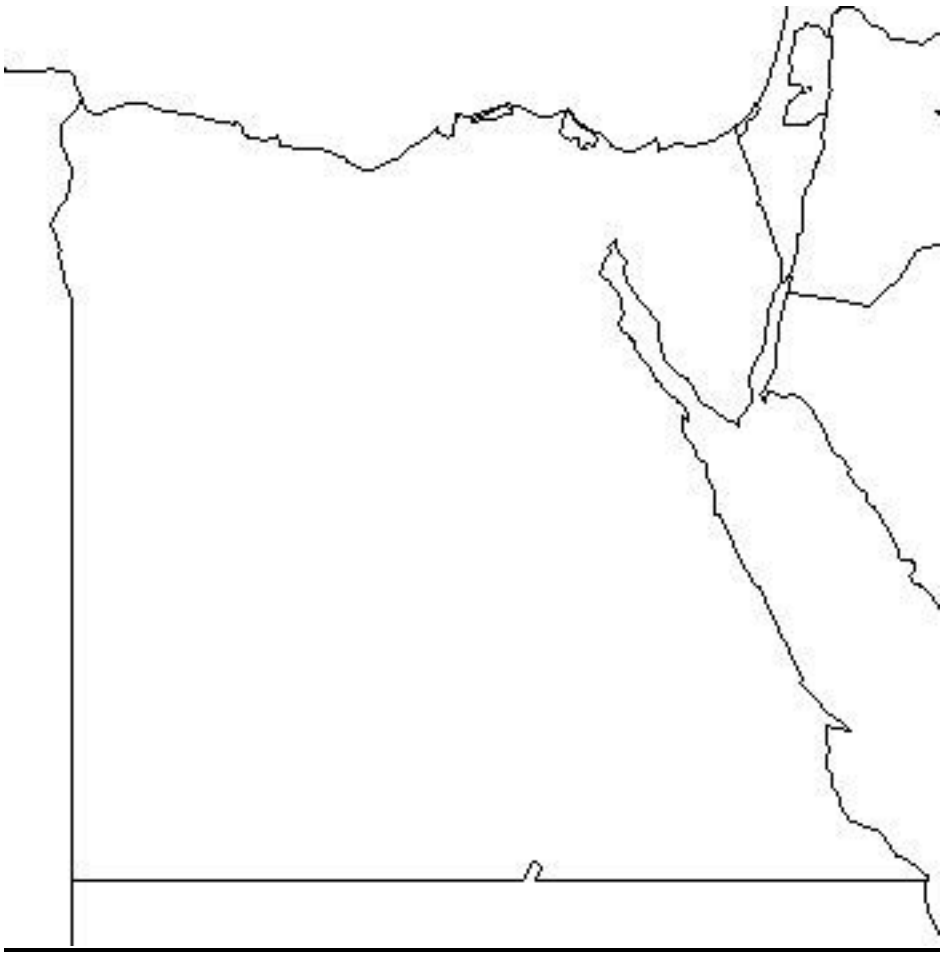
Map of Ancient Egypt

Credit: D. Bachmann, Wikimedia.org

Terrain Map of Egypt

Credit: Central Intelligence Agency, 1997

Blank Egypt map



Djoser's Pyramid in Saqqara

Credit: Creative Commons

Cobra frieze detail, Djoser's Pyramid

Credit: Wikimedia.org

Djoser's Pyramid
Picture Credit: Gary Ku, Creative Commons

Djoser's Pyramid
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Khafre Pyramid and Sphinx
Picture Credit: Than 217, Wikipedia.org

Great Sphinx of Giza
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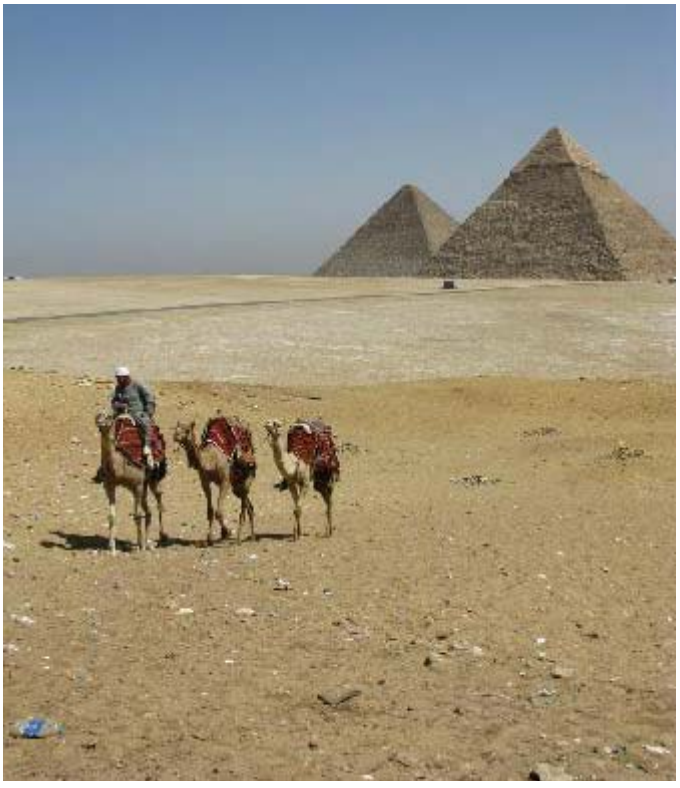
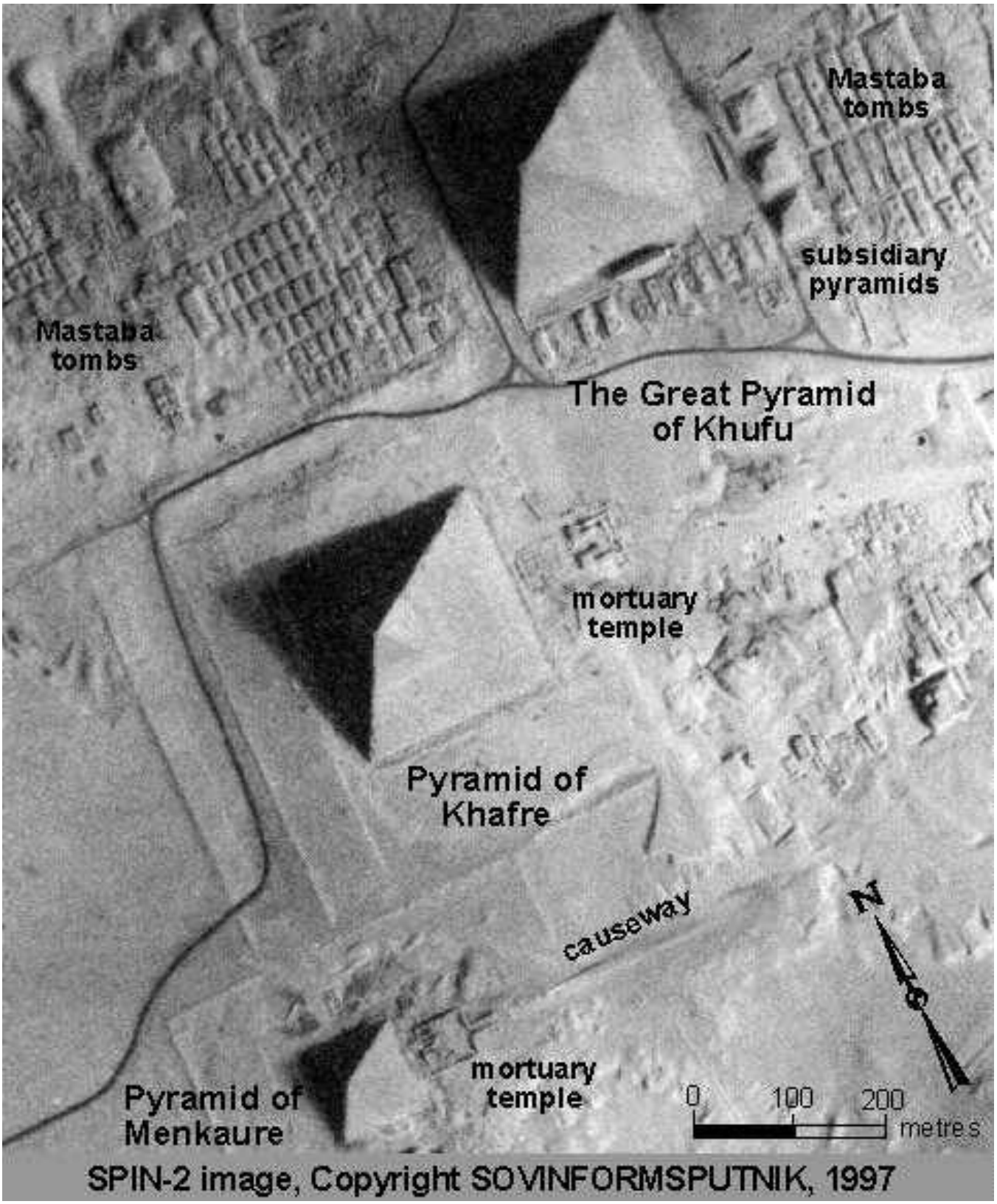
Pyramids and Seated Camels
Picture Credit: Shazlex, tripadvisor.com



Pyramids and Camels
Picture Credit: Shazlex, tripadvisor.com



Pyramids of Giza, Satellite View
Credit: Russian Satellite: Sovinformsputnik, 1997

WadJet Eye

Credit: Wikimedia.org

Tutankhamen Scarab

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Old Cairo-Convent of St. George

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Coptic Cairo-Hanging Church

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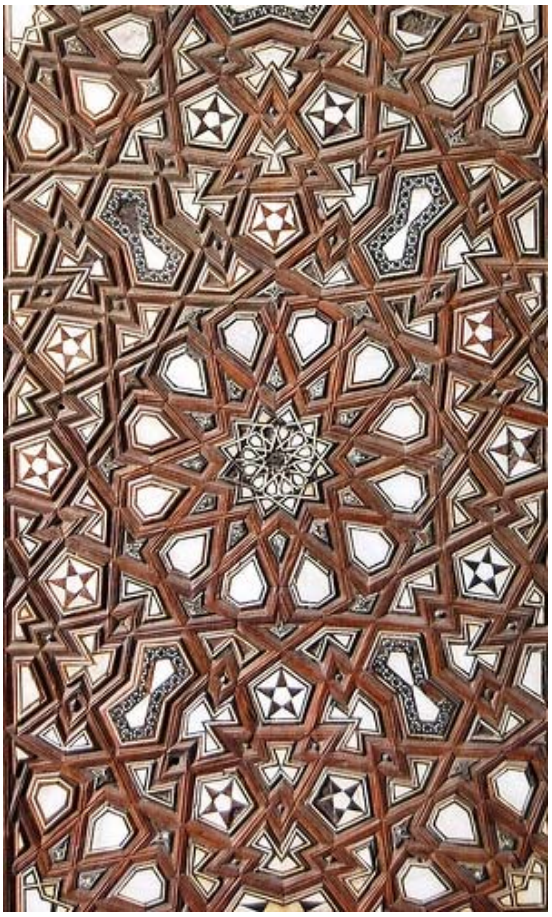
Islamic Cairo

Detail of Sultan Ashraf Barsbey Mosque in Cairo Zishansheikh, Creative Commons, Wikimedia.org



Detail of Al-Muayyad Mosque in Cairo Zishansheikh, Creative Commons, Wikimedia.org

Detail Sultan Qaytbay's Sabil-Kuttab (water fountain and school) Cairo Credit: Baldiri, Creative Commons, Wikimedia.org

Modern Cairo

Cairo with view of Nile River Credit Mazda, Gnu Free Documentation License

Old Cairo Opera House Credit: Tarekzaki, Wikipedia.org

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Ramses Street at night
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View from the Tower of Cairo

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Black Desert, Egypt

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Wadi Degla Canyon,
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White Desert, Egypt Credit: Steven Eric Wood, DHD Multimedia Gallery

White Desert between Farafra and Bahariya Oasis, Egypt Credit: Michael Hoefner, Creative Commons

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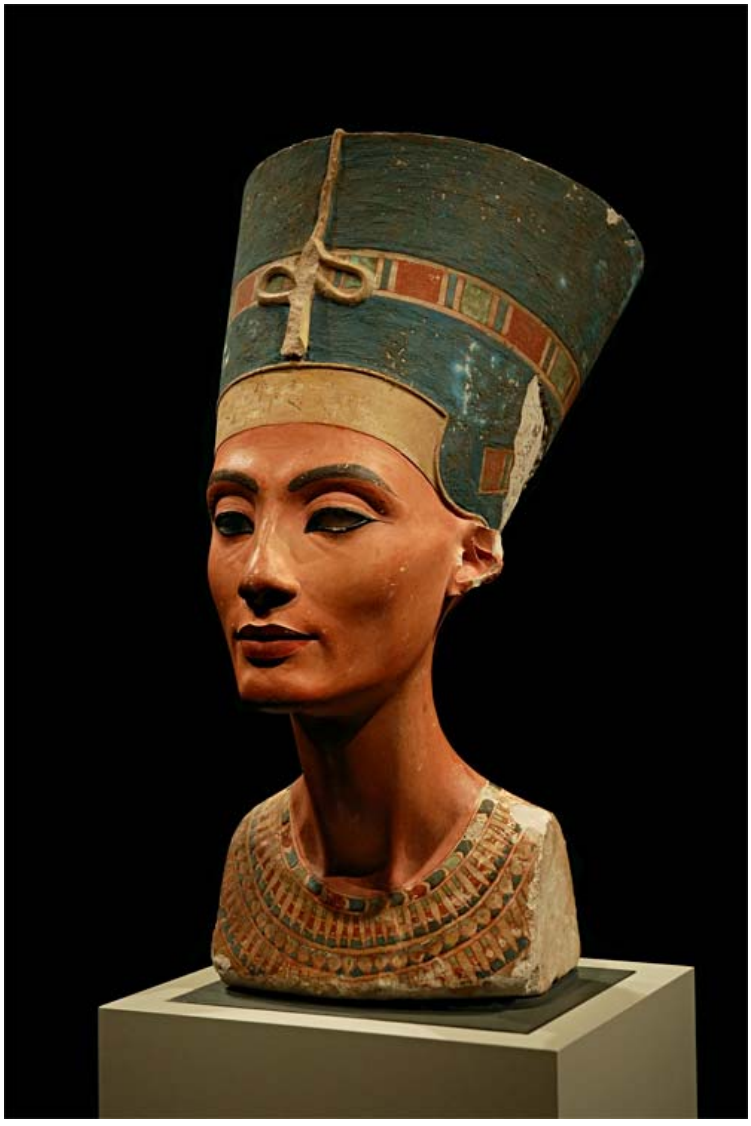

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General information about ancient Egypt

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Maps on Egypt

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http://www.ees.ac.uk/home/home.htm
Egyptian Exploration Society –Articles about Egypt & Sudan

http://lcweb2.loc.gov/frd/cs/egtoc.html
Library of Congress-country study

http://www.magicofmyth.wordpress.com
blog created for student use in this unit

GENERAL INTERNET RESOURCES

Answers.com **http://www.answers.com**

Answers.com is a free, ad-supported, reference search service, created to provide you with instant answers on over a million topics. As opposed to standard search engines that serve up a list of links for you to follow, Answers.com displays quick, snapshot answers with concise, reliable information. Editors take the content from over 100 authoritative encyclopedias, dictionaries, glossaries and atlases, carefully chosen for breadth and quality. Answers.com has incorporated citation functionality with the goal of educating and helping users cite their work. Clicking on the "Cite" button "Cite" (which can be found next to each copyright at the bottom of each Answer Page), will direct you to a fully-formatted citation, ready for students to include in their bibliography. They can even choose from MLA, Chicago and APA styles.

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Book-making Techniques

The websites below provide many templates and instructions for book-making projects:

http://www.artbookscreativity.org/pdf/Accordian.pdf

http://www.artbookscreativity.org/pdf/Rubber-Band.pdf

http://www.artbookscreativity.org/pdf/Tunnel.pdf

www.booklyn.org

http://www.booklyn.org/education/accordion.pdf

Citation Machine.net **http://citationmachine.net**

Citation Machine is an interactive Web tool designed to model the proper format for citing information property from print and electronic resources. If you cannot find how to cite the specific type of reference you seek or have a question about how to cite a particular resource that is unique in some way, consult your teacher or the *MLA Handbook for Writers of Research Papers: 6th Edition* or *Publication Manual of the American Psychological Association: 5th Edition*.

Dictionary.com **http://dictionary.reference.com**

A multi-source dictionary search service produced by Lexico Publishing Group, LLC, a leading provider of language reference products and services on the Internet. To use the dictionary or thesaurus, simply type a word in the blue search box that appears at the top of every page and then click the

Search button. You can also sign-up for the 'Word of the Day' email or browse the other multi-lingual dictionaries featured on the site.

Note: This site is FREE, but there are pop-up advertisements

Puzzlemaker **http://puzzlemaker.discoveryeducation.com**

Puzzlemaker is part of Discovery Education's web page which provides school resources for teachers and students. The puzzle generator includes customized word searches, crossword puzzles, acrostics, and more.

Schools.nyc.gov **http://www.schools.nyc.gov**

Schools.nyc.gov is a public comprehensive site which is a free service of The City of New York. This site provides detailed information of NYC Department of Education services. It can be useful for viewing profiles of current offices, programs, and supports. This site has many useful links for the research of educational policies, programs, and instruction in many subject areas.

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