NATIVE AMERICAN EAGLE LEGENDS

Grade Level Range: 1st-3rd grade
Content Areas Addressed: Literature, Writing, Cultural Studies
Group Size: Whole class
Duration: 1 week (1 hour/day)
Key Vocabulary: Folktale, Legend
Materials Needed: Native American Legend Books

Lesson Objective
The student will recount traditional Native American legend about eagles and determine their message or moral.
The student will write a legend about an eagle in the style of the Native Americans and strengthen it through revising and editing.

Methods
A mentor text will be presented to give the students an example of what type of work they will be writing. Modeling will be used to demonstrate how students can write their own Native American eagle legends. Writing will be used individually.

Procedures
The teacher will read an age-appropriate Native American bald eagle legend found on the link in the resources section to the class. The class will discuss the components of a legend and the moral of the story. The class will write a legend together with the teacher’s guidance. Then each student will then pick from the selection of legend books provided to the classroom. The students will study their legend books and create an eagle legend of their own including prewriting. The students will write a legend with a moral of any kind involving an eagle. The students will have a peer review section before revision, typing and then publishing. The students will then create a cover to their story and turn their story in for grading.

Evaluation Alternatives
The students’ Native American eagle legends would be assessed as a formal summative assessment. A writing rubric would be used to assess student’s understanding of Native American culture, grammar, and punctuation. Each legend must contain a reasonable message or theme that can be orally explained by the author.

Background
This lesson would be best received if it were used in a unit discussing Native American culture. Students would benefit in this activity by knowing the Native American writing style and way of life.
Resources
Old Indian Legends by Zitkala-Sa: http://www.native-languages.org/legends-eagle.htm

Standards Addressed
CCSS.ELA-READING.L.2
Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.

CCSS.ELA-LITERACY.W.2.5
With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.
LIFE CYCLE OF AN EAGLE 3D BOOK

Grade Level Range: 1st-3rd grade
Content Areas Addressed: Life Science, Reading, Writing, Art
Group Size: Individual
Duration: 2 to 3 days. 30 minutes each day
Key Vocabulary: life cycle, incubates, hatchlings, nestlings, fledglings, juvenile, maturity

Lesson Objective
The student will investigate the life cycle of an eagle and recall the information in a short description of each stage of the life cycle give art material with 100% accuracy.

Methods
Art methods of creating a 3D life cycle along with writing skills.

Procedures
DAY 1: Begin by bringing all students to the reading carpet. Read the book My little book of Bald Eagles by Hope Irvin Marston. When finished reading review the lifecycle of a bald eagle. Draw a life cycle chart up on the board to allow a visual for all students. Go over each part of the life cycle in greater detail. **The Egg:** Eagles build their nests atop tall trees, high cliffs and bluffs. The female usually lays a clutch of two eggs, though she can lay as many as four. She incubates (ask if students know what this means) the eggs for about 40 days by sitting on the nest to keep them warm. Depending upon the climate, incubation can range from 30 to 50 days. Sometimes males may incubate the eggs too so the mom can go find food. More commonly, the male takes part in this life cycle stage by catching small mammals to feed to the nesting female. **Hatchlings:** After emerging from its egg covered in white fluff, the helpless hatchling is completely dependent upon its mother for food. It weighs about three ounces. (put into context) The first hatchling to emerge from its egg has an age and size advantage over the others in the nest. It grows stronger faster and can compete more successfully for food. **Nestlings:** Eagles remain as "nestlings" for 10 to 12 weeks. That is how long it takes for them to become fully feathered enough to fly and large enough to begin hunting for prey. The whole time eagles are nestlings they live in the nest and rely on their parents to take care of them. **Fledglings:** The eagles will "fledge" or leave the nest for the first time. The fledgling eaglet continues to return to the nest and stay around its parents for another month or more, learning how to hunt and refining its flying techniques. It may beg for food as long as the adult birds are willing to feed it. In all, it will be at least 120 days after birth before the young eagle is totally independent. **Juvenile Stage:** Even
after it has left the nest, the juvenile eaglet faces survival challenges. Once independent, juvenile eagles migrate to find a winter territory. Where prey is plentiful, they don’t have to migrate at all, but they do have to disperse to find a big enough territory to support them. In four to five years, the juvenile will reach maturity. Until then, it may return to its birth nest from time to time. **Maturity:** When bald eagles reach maturity, at between four and five years, they develop white heads and necks and reach a wingspan of almost seven feet (put into context). Eagles form mating pairs for life and build enormous nests up to 10 feet in diameter, weighing up to 2,000 pounds. The adult pairs have no natural predators except man and can live up to 30 years."

**DAY 2 & 3:** (The eagle camera at Berry College could be on while the students work) The students will be creating a 3D lifecycle of a bald eagle model. Have all supplies ready on the table. The students are to create an image and write a description for each portion of the lifecycle. The organizational chart is attached. When students are complete they will turn in bald eagle life cycle charts. These charts can be graded and/or displayed in the hallway.

**Evaluation Alternatives**
The students could be graded on if all six stages of the lifecycle are present, in order and have accurate facts.

**Background**
The six stages of an eagles life cycle (available in DAY 1 lesson review)

**Resources**
My little book of Bald Eagles by Hope Irvin Marston

**Standards Addressed**
S2L1. Students will investigate the life cycles of different living organisms.
   a. Determine the sequence of the life cycle of common animals in your area: a mammal such as a cat or dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.

ELACC2RI1: Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

ELACC2W8: Recall information from experiences or gather information from provided sources to answer a question.
MEASURING THE HEIGHT OF AN EAGLE’S NEST

Grade Level Range: 2nd-4th grade
Content Areas Addressed: Math (measurement)
Group Size: Whole Class, Partner Pairs
Duration: Teacher’s choice; appx. 1-2 hours total
Key Vocabulary: Height, Measure
Materials Needed: Ruler, yardstick

Lesson Objective
The student will correctly measure the height of an eagle’s nest with their assigned partner using a ruler and a yardstick.

Methods
A new method of measuring will be introduced, estimating will be incorporated. The teacher will base the lesson upon student experimentation and group discussion.

Procedures
The class will discuss what has been learned about where eagles live. What is their nest made of? How big are their nests? Where do they usually make their nests? The teacher will ask how high students think the nests are. Then it will be announced that the class will get to see a real eagle nest and will measure how high from the ground it is. The teacher will demonstrate and explain how to do it:

“Student A will stand at the base of the tree, and hold a ruler straight out in front of them in a vertical position. They will close one eye and back away from the tree until they reach the exact point at which the ruler and the tree appear to be the same size. Student A will freeze and have their partner use the yardstick to measure the distance between the tree and the ruler. That is the approximate height of the tree.”

Before these steps take place, partner pairs should be assigned. Each partner pair should work together to come up with an estimation of how high (in feet) the nest will be (counting the nest as the top of the tree). This estimation should be documented on a piece of paper.

If this does not take place near Berry or any other eagle nest, the teacher can discuss with students which tree in the area would be most likely to host an eagle’s nest, and why. They can then imagine an eagle’s nest in the top of that tree and measure it.

Once the class has traveled to the site of the eagle’s nest or tree and written the actual measured height on their paper under their estimation, the teacher can facilitate a class discussion. Each partner pair should share how high they measured the tree to be. The class can talk about why the numbers are not all the same—what might have affected the number and made it lower or higher?
Are there more easy, accurate, or effective ways to measure the height of eagle’s nests? How do the actual measurements compare to the initial height estimations? Where else could they apply this new method of indirect measuring?

If the teacher decides to add an extension to the experience, students may convert their measurements from feet to yards and to inches. Another optional extension could involve using graphs to draw to-scale drawings of the tree as compared to other tall objects the students measure outside.

**Evaluation Alternatives**
The students will be informally observed to ensure they are working well with their partner and performing their measuring task accurately. The partner pairs will each turn in their paper, which will be used as a written assessment. The paper should include an estimation and the actual measurement.

**Background**
This lesson should take place in a math lesson about measurement or unit conversions. Students must be comfortable with using rulers and yardsticks.

**Resources**

**Standards Addressed**
CCSS.MATH.CONTENT.2.MD.A.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

CCSS.MATH.CONTENT.2.MD.A.3: Estimate lengths using units of inches, feet, centimeters, and meters.