Diet: Argentine Horned Frog

An Elementary Science Lesson Plan
Designed for Group Inquiry
Based on the 5E Inquiry Model

Grade Level: This particular lesson is a level one inquiry and is designed for use in a first-grade science classroom. First-grade students will study the needs of frogs and how food plays an important role in the life of a frog. This lesson will both reinforce this concept as well as establish knowledge regarding the importance of food in their lives.

Science Concept: This lesson is aimed at helping students understand the concept of nutrition and diet. This lesson also provides students with the opportunity to make predictions and reinforce their understanding through a sorting activity.

Relationship to California Science Content Standards: (1.2.b) Students know both plants and animals need water, animals need food and plants need light.

Learning Objective: Students will identify five different food types for an Argentine Horned Frog.

Lesson Implementation Plan: Students will work individually.

Materials:
• White construction paper (one sheet per student)
• Crayons (or color equivalents)
• Copies of Argentine Horned Frog 1.1 (one per student) (attached)
• Copies of Argentine Horned Frog 1.2 (one per student) (attached)
• Copies of Argentine Horned Frog 1.3 (Differentiation Plan) (one per student) (attached)
• Copies of Argentine Horned Frog 1.4 (Differentiation Plan) (one per student) (attached)
• Copies of Argentine Horned Frog 1.5 (Extension Activity) (one per student) (attached)
• Brown paper lunch bags (one per student)
• Glue
• Whiteboard with appropriate markers or large paper with markers (to be posted at front of classroom)
• Computer with DVD-Rom access
• Projector
• Projector screen
• The Frog with the Big Mouth by Teresea Bateman
  o MLK Library call number: J 398.2 Bateman in East SJ Carnegie Folk and Fairy Tales or Santa Teresa Folk and Fairy Tales
**Engage:** The teacher will begin the lesson by playing the following video for students: 

In this video, Kermit the Frog sings a song about being green. Afterwards, ask students, “Who was that in the video?” and “What kind of animal is he?” After this discussion, explain to students that they will be exploring frogs (more specifically the Argentine Horned Frog) and what they eat today. Then, begin a guided discussion with students. Make sure you explain the term diet, what a diet is, the importance of nutrition, and how eating helps keep animals (and humans) alive. Guide your students towards the understanding that like humans, all animals need food to live.

**Explore:** After this discussion, read *The Frog with the Big Mouth* by Teresa Bateman aloud to students. After reading this story, instruct students to form predictions about what they think the frog in the story (the Argentine Horned Frog) would eat. After students make their predictions, give each student a piece of white construction paper, and instruct them to draw pictures of their predictions while also providing clear labels as to what illustration represents. Explain to students that they must draw and label at least five different things. During this time, walk around the classroom to view student progress. Allow students to make their own predictions without teacher assistance.

**Explain:** Once students have had ample time to finish drawing their predictions, host a guided discussion about the students’ predictions. Ask students to share their pictures, explain their predictions, and tell their classmates why they believe their prediction is correct. During this class discussion and sharing, list each student prediction on the whiteboard or a large piece of paper.

**Elaborate:** Next, lead a guided discussion centered around the foods an Argentine Horned Frog eats. Use the Powerpoint (attached) as it provides images of the foods the Argentine Horned Frog eats. Once you have finished going through the Powerpoint, review the class list of food predictions with your students. Take students through this list, and have them vote for which predicted foods to cross off and which to keep. If a student votes a certain way, have them explain why they are crossing a food off or keeping it. After going through all the food items on your list, ask students, “Why do animals need food?” Refer back to the information presented to students in the engage portion of the lesson. Ask students if they ever did not eat enough food. Ask students, “How did that feel?” “What happened to you when you did not eat enough food?” Allow students some time in between questions to make connections between their dietary needs and those of frogs.

After your discussion, pass out the Argentine Horned Frog Puppet worksheet (Argentine Horned Frog 1.1). Also, give students one brown paper lunch bag. Instruct them to color their frog puppet. Be sure to leave the images of the various frogs from the Powerpoint up in the classroom so that students may use them as references. Next, explain to students that when they are finished coloring their puppet, they may cut it out carefully and then
glue the pieces to the brown paper lunch bag appropriately. Once every child has had ample time to finish their frog puppets, pass out the Food Choice worksheet (Argentine Horned Frog 1.2). Tell each student to circle the foods that they believe their Argentine Horned Frog puppets would enjoy eating or would be the best diet for them.

**Evaluate:**
(a) Formative: Gauge student understanding based on participation in class and drawing.
(b) Summative: Gauge student understanding of the nutrition needs of frogs by assessing student ability to correctly identify five different food types of the Argentine Horned Frog.
(c) Formal: Collect and review all worksheets as well as the student’s food predictions drawings and Argentine Horned Frog Puppet.

**Possible Extension Activity:** At any point you may insert this activity into the lesson plan. Make sure you introduce it appropriately though. Begin by passing out the Argentine Horned Frog 1.5, and have your students write a short story about their Argentine Horned Frog Puppets’ adventures in finding food. Have your students write a practice draft on a piece of lined paper, and then using the worksheet provided, write their final version on the lines provided. Also instruct students to draw an illustration to go with their story in the top portion. You may use this Argentine Horned Frog 1.5 as another form of assessment for a language arts assignment.

**Differentiation Plan:**
- **Cognitive:** For students who require more of a classroom challenge, you may have them complete Argentine Horned Frog 1.3 and 1.4 in place of the Argentine Horned Frog 1.2. Pass out Argentine Horned Frog Worksheet 1.3 to each student, and have them cut out the individual pieces. Instruct each child that the food pieces represent 15 different food types that their frog puppets are going to “eat.” Encourage students to sift through the items with their frog puppets to find those foods that would be tasty and delicious to the Argentine Horned Frog. Once they have picked out the foods they think the Argentine Horned Frog would eat, instruct them to glue their pieces onto the “I eat” side of Argentine Horned Frog 1.4. Once they have finished this task, have them glue the rest of the pieces onto the “I don’t eat” side of Argentine Horned Frog 1.4.
- **English Language Learners:** For English Language Learners, increased assistance can be provided with “word wall” definitions of difficult-to-learn vocabulary words (such as diet, nutrition etc.). You can also provide greater contextual support in the beginning of the lesson by introducing the topic of diet and nutrition by asking students: “What do you need to eat to survive?” This will be done in the beginning of the lesson rather than later.