My Pet “Lizard” Rock

An Elementary Science Lesson Plan
Designed For Group Inquiry
Based On the 5E Inquiry Model

GRADE LEVEL: Kindergarten (Open)

SCIENCE CONCEPT (the Main Idea or Enduring Understanding): This is lesson aimed to helping students understand the characteristics of lizards and begin exploring how the lizard’s characteristics relate to their living environment (Habitat).

RELATIONSHIP TO CALIFORNIA SCIENCE CONTENT STANDARDS:
Kindergarten Life Sciences:
  2. Different types of plants and animals inhabit the earth. As a basis for understanding this concept:
     a. Students know how to observe and describe similarities and differences in the appearance and behavior of animals

LEARNING OBJECTIVES:
  1. Students will create a pet “lizard” and its habitat based on their exploration of lizards and their characteristics.

EVALUATION IDEAS:
  1. Summative – Handout. Students can also pair-share their handout with a group member to pre-assess.

    2. Formative – Assessment can be done through checking students comprehension while discussing what they learned about lizards through observation and readings.

CONCEPTUAL BACKGROUND:
Lizard – reptile with four legs, two moveable eyes and tail
Reptiles – lays eggs, cold blooded, and is usually scaly
Habitat – place where a person or thing lives; can most likely be found
Characteristics - features that help us describe something

LESSON IMPLEMENTATION PLAN:
ENGAGE – Bring in a lizards (available through SERC; see safety precautions). Ask the class to help you identify what type of animal is in the tanks (lizards) based on its characteristics (skin, color, tail, tongue, etc.). Write student responses on the board.
EXPLORE – In groups of 4, allow students to observe the lizards in each tank. Inform them of the precautions/rules they must demonstrate to see the lizards. As groups are walking around to each tank, ask questions to further their exploration such as (approximately every 2 min.):

- Where might this lizard live?
- What do lizards eat?
- What animals look like lizards?
- What does their skin look like? Why might this be?

Have students draw what they see during their exploration.

EXPLAIN – Read two stories on lizards. Relate the lizards in the stories to the lizards on display in class. Summarize both stories relating to lizards and their environment adding more to the students’ response in ENGAGE.

Next, have each group create their own pet lizard rock. Have groups pick the following student roles:

1. Checker
2. Book Collector
3. Materials Manager

Have person number 3 go to get the materials that will be set aside (away from the displayed materials). Have person number 2 pick a book their group can use for referencing when creating their pet lizard which can be on display near the live lizards.

ELABORATE – After the majority of students have finished creating their pet rock, show them your pet rock. Explain the characteristics it poses and why you chose certain features. Call on several volunteers to share their lizard and where they got their idea.

EVALUATE –

(a) Summative – Handout. Students can also pair-share their handout with a group member to pre-asses.

(b) Formative – Assessment can be done through checking students comprehension while discussing what they learned about lizards through observation and readings.

DIFFERENTIATION PLANS:

Behavioral for Student A – Always make sure students are engaged and moving. If students begin to show behavior problems, have them check on the lizards, using their eyes or create names for each. If students finish early than most, have them create a lizard song and or dance for their pet “lizard” rock.
Cognitive for Student B – Facilitate interaction amongst groups. Student B will benefit from working with others for guidance and understanding. Have slightly higher academic leveled students around Student B for support. Make sure this student is given the opportunity to practice communicating whether its with a peer group or the entire class.

Cognitive for Student C – Work with Student C at the beginning of each step to make sure they understand what to do at the beginning. Ask students in each group to help their group member if they may feel they need to add something extra.

Affective for Student D – Student D can discuss how the live lizard may feel throughout the activity and how its feelings may change in different environments. To cater to the students emotional needs, have this students act out how the lizard in the stories are feeling. This student may also be helpful when going over the safety guidelines of the live lizard in the classroom. Have this student express how important it is to be sensitive to the live lizard and stress how their peers may feel if they were in the same situation as the lizard.

Language Demands for Students E, F, G
Habitat – Raise the idea it’s about “Where something lives”
Lizard/Reptiles – (images and live visual)
Characteristics – Repeat the question “What do they look like?”
Scaly – (images, refer to boots and snakes)

LIST OF MATERIALS (PER GROUP):
Small, round stones
Books on lizards (one for reading to your class and one for each group to reference). Here are some examples:
Plastic wiggly eyes
Glue
Washable paint and paint brushes
Old News Papers
Construction Paper
Safety scissors
Two Handouts (last pages)
DIRECTIONS OR SPECIAL INSTRUCTIONS; SAFETY CONCERNS, ETC.

Making the Pet “Lizard” Rock:
(For students – Approximately 20 min.)
1. Pick a stone

2. Paint the rock (with different designs and colors is desired) and sit to dry

3. Using construction paper, draw and cut out the lizard’s legs, arms, tail, and mouth (triangle shaped)

*Depending on the students prior usage with scissors, you may want to pre cut the limbs of the lizard.

4. Glue the lizard’s body parts including its wiggly eyes

Observing Lizards Safety:
*Lizards should be in the class for no longer than 2 weeks*
1. Using your eyes, observe the lizard
2. “As we would be, the lizards may be a little scared because it’s their first time in this classroom and meeting us. Let us be friendly by keeping our hands to ourselves and smiling at them”
3. The tops must stay on the tanks at all times
My First Look at the Class Lizard
My Pet “Lizard” Rock

Draw Your Pet Lizard in its Habitat

My Pet “Lizard” Rock’s Name: ____________________________________________

My Pet “Lizard” Rock lives in the ______________________________________ (Habitat)

My Pet “Lizard” Rock is ____________________________________________ (What does your lizard look like?)
My Pet “Lizard” Rock

Students images and below descriptions may vary. Provide an example prior to students beginning worksheet to guide them through the process of completing the worksheet.

RUBRIC:
To score this worksheet, full credit would be this box being completed along with each line below. Spelling and grammatical errors are acceptable. Points can be deducted for each line and this drawing box not being completed making this worksheet 4 points total.

My Pet “Lizard” Rock’s Name: ___________________ George

My Pet “Lizard” Rock lives in the ____________ The Savannah Desert ________________ (Habitat)

My Pet “Lizard” Rock is ______ small and green with really large eyes for him to see. (What does your lizard look like?)