

Lesson Plan 2: Amphibian Research

Teacher:

Date:

Subject Area/Grade Level: Science/6th Grade

Materials: Informational books on the animals studied in the lesson, access to the Internet in the classroom, encyclopedias, markers, poster paper

Standard: *Investigation and Experimentation*

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students will:

d. Communicate the steps and results from an investigation in written reports and oral presentations.

Objective: Students will create a group poster that outlines distinctive characteristics about the Argentine Horned Frog, Coast Range Newt, California Toad, Pacific Chorus Frog, and Fire Belly Toads

Adaptation strategies: This lesson allows children to use a variety of media to research and convey what they have learned. They are also working in groups where they can help each other out if need be.

Engagement:

1. In order to get students interested in the lesson, the teacher can play a video about amphibians, show pictures, or, if possible, have live animal examples in the classroom. This part is fairly flexible.
2. Discuss with students what they already know about amphibians and any possible experiences they might have had.
3. Break students into groups of 5 (give or take, depending on enrollment).
4. Using a chart that is pre-determined by the teacher, each child will be given a role in their group. These roles include facilitator, recorder, materials, and reporter. Two students can be grouped into the reporter role, as this involves presenting a poster to the class.
5. Review with the class what each role means and the responsibilities each child is required to have in their group.

6. Assign an animal (as listed in the objectives section) to each group.

Exploration:

1. Using the books, internet, or other resources available in the classroom, students will research certain characteristics and facts about their animal.
2. Students should be sure to answer the following questions: What is the amphibian's common name, class, order, family, habitat and geographic range, diet, social behavior, and physical characteristics? May use handout to help organize research.
3. In order to avoid conflict between groups when deciding what medium to use to conduct their research, limit the time each group has with a certain material so that each group has an opportunity to try everything.

Explanation:

1. When students are done with their research, they will come together to design a fact poster about their assigned animal. They should address each of the content areas mentioned in the previous section.
2. Groups will present their posters to the class. Remind students to pay close attention to what other groups have on their poster, as it will come in handy for a Jeopardy-style game later.
3. When the presentations are complete, students can hang their posters around the room and return to their seats.

Elaboration:

1. Working alone or in pairs with the person next to them, hand out a worksheet to each student (see attached).
2. Allow them to walk around the classroom if need be in order to complete the worksheet.
3. When everyone is done, bring students back together and discuss what they found most interesting/gross/ cool, etc. about the amphibians studied that day. Ask, "Have any of their opinions or thoughts about amphibians changed since before the activity?"

Evaluation:

1. Students will demonstrate their understanding through the information presented on their posters, their research skills, and the worksheets. Class discussion will also allow them to voice any thoughts they might have had that could not be presented in the poster and/or worksheet.

2. Review the worksheet as a class and compare answers.
3. In the Amphibian Jeopardy game that can be played later that day or on a following day, students will also get to show what they have learned.

References

N/A: this was an original idea

Name: _____

Amphibian Research Activity Worksheet

Match the amphibian on the left with a characteristic about it on the right. It is possible for each amphibian to have multiple characteristics listed.

1. Argentine Horned Frog	a. Family: Hylidae
2. Coast Range Newt	b. Genus/Species: Anaxyrus Boreas
3. California Toad	c. Geographic Range: rain forests of Argentine, Uruguay, and Brazil
4. Pacific Chorus Frog	d. Diet: insects, rodents, lizards
5. Fire Belly Toads	e. Genus/Species: Taricha torosa torosa
	f. Large mouth, rough skin, bright green color with red and black markings
	g. Tan/reddish color, poisonous
	h. Family: Salamandridae
	i. Diet: invertebrates, bugs, and algae
	j. Habitat: desert, marshes, forest, meadows, woodlands, lakes, and creeks
	k. Bright green back with red stomach; also covered in black spots
	l. Genus/Species: Bombina orientalis
	m. Diet: earthworms, snails, slugs, mosquitoes, and other invertebrates
	n. Genus: pseudacris

Name: _____

Amphibian Research Activity Worksheet---Answer Key

Match the amphibian on the left with a characteristic about it on the right. It is possible for each amphibian to have multiple characteristics listed.

<p>6. Argentine Horned Frog C, d, f</p>	<p>a. Family: Hylidae b. Genus/Species: Anaxyrus Boreas c. Geographic Range: rain forests of Argentine, Uruguay, and Brazil</p>
<p>7. Coast Range Newt H, g, e</p>	<p>d. Diet: insects, rodents, lizards e. Genus/Species: Taricha torosa torosa</p>
<p>8. California Toad I, J, B</p>	<p>f. Large mouth, rough skin, bright green color with red and black markings g. Tan/reddish color, poisonous h. Family: Salamandridae</p>
<p>9. Pacific Chorus Frog A, n</p>	<p>i. Diet: invertebrates, bugs, and algae j. Habitat: desert, marshes, forest, meadows, woodlands, lakes, and creeks</p>
<p>10. Fire Belly Toads K, M, L</p>	<p>k. Bright green back with red stomach; also covered in black spots l. Genus/Species: Bombina orientalis m. Diet: earthworms, snails, slugs, mosquitoes, and other invertebrates n. Genus: pseudacris</p>

Name: _____

Animal: _____

Amphibian Research Activity Organizer

1. Common name:
2. Class:
3. Order:
4. Family:
5. Habitat:
6. Geographic range:
7. Diet:
8. Social behavior:
9. Physical characteristics:
10. Additional interesting facts:

