

Grade 4	Lesson 12: Amphibians and Reptiles	Reference to English Interconnections Lesson
Science Standard(s): Standard 5 Objective 3		
Content Objective(s):		Language Objective(s):
Students will compare the structure and behavior of Utah's amphibians and reptiles by doing a project with a partner and classifying amphibians and reptiles on their exit tickets. <i>I can compare the physical characteristics and behavior of Utah's amphibians and reptiles by doing a project with my partner and classifying amphibians and reptiles on my exit ticket.</i>		Students will discuss the structure and behavior of Utah's amphibians and reptiles with their partners and other group mates. <i>I can discuss the structure and behavior of Utah's amphibians and reptiles with my partner and other group mates.</i>
Essential Questions: What is the difference between an amphibian and a reptile?		Required Academic Vocabulary for Word Wall: Listen: Amphibian, Reptile, coldblooded, frog, toad, newt, salamander, amphibians, carnivorous, snake, lizard, tortoise, skin, eggs, moist, slippery, dry, live, prey, young, scales, lungs Zuhören: die Amphibie, das Reptil, kaltblütig, der Frosch, die Kröte, der Wassermolch, der Salamander, die Amphibien, fleischfressend, die Schlange, die Eidechse, die Schildkröte, die Haut, die Eier, feucht, glitschig, trocken, lebendig, ausbeuten/das Beutetier, jung, die Schuppen, die Lungen Speak: Amphibian, Reptile, coldblooded, characteristics, frog, toad, newt, salamander, amphibians, carnivorous, snake, lizard, tortoise, skin, eggs, moist, slippery, dry, live, prey, young, scales, lungs Sprechen: die Amphibie, das Reptil, kaltblütig, der Frosch, die Kröte, der Wassermolch, der Salamander, die Amphibien, fleischfressend, die Schlange, die Eidechse, die Schildkröte, die Haut, die Eier, feucht, glitschig, trocken, lebendig, ausbeuten/das Beutetier, jung, die Schuppen, die Lungen Read: Amphibian, Reptile, coldblooded, skin, eggs, moist, slippery, dry, live, prey, young, scales, lungs Lesen: die Amphibie, das Reptil, kaltblütig, die Haut, die Eier, feucht, glitschig, trocken, lebendig, ausbeuten/das Beutetier, jung, die Schuppen, die Lungen Write: Amphibian, Reptile, coldblooded, skin, eggs, moist, slippery, dry, live, prey, young, scales, lungs Schreiben: die Amphibie, das Reptil, kaltblütig, die Haut, die Eier, feucht, glitschig, trocken, lebendig, ausbeuten/das Beutetier, jung, die Schuppen, die Lungen Sentence Frames: Use the characteristics on the graphic organizer to fill in the blanks in the sentences. <i>This is the amphibian because it _____, _____, and _____.</i> <i>This is the reptile because it _____, _____, and _____.</i> Satzbau: Das ist eine Amphibie, weil _____, _____ und _____. Das ist ein Reptil, weil _____, _____ und _____.
Materials: - Utah Amphibian and Reptile Picture Cards - Paper - Art Supplies		Additional Lesson Vocabulary: Legs, water, eyes, hawk, red fox, carp, coyote, trout, robin, mammal, fish die Beine, das Wasser, die Augen, der Falke, der Rotfuchs, der Karpfen, der Coyote, die Forelle, das Rotkehlchen, das Säugetier, der Fisch

Opening: (5 minutes)

Have the students read the objective to their partners and discuss what they think they will learn today. As partners, have them discuss what they already know about the topic. Have each partnership come up with at least one thing that they would like to know more about the topic.

Hook/Introduce the Topic:

Play "Can You Name It?"

Questions:

"I'll name an animal and you tell me what group it belongs to." (Bird, Fish, Mammal, Amphibian, or Reptile)

Hawk - bird

Red Fox - mammal

Carp - fish

Coyote - mammal

Trout - fish

Robin - bird

Frog - amphibian (students may not know)

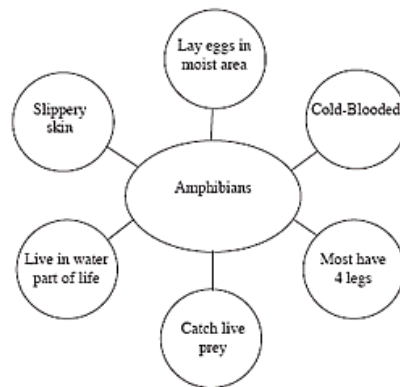
Lizard - reptile (students may not know)

"We've studied about birds, mammals, and fish. Now, let's learn more about the characteristics of amphibians and reptiles. Then we will be able to classify them!"

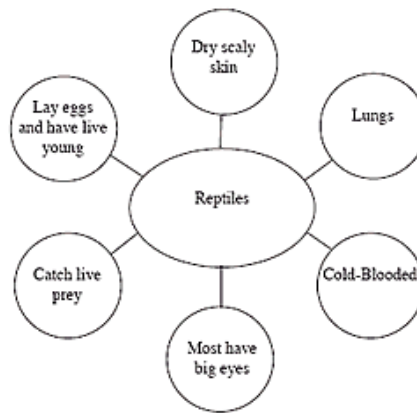
Introduction to New Material: (10 minutes)**Amphibians:**

- Draw the graphic organizer below, on the board and fill it out as you teach.
- Use the information paragraphs to help the students record facts about amphibians on a graphic organizer of their own. (You can print it for them or have them draw their own.)
- Use the teach-teach strategy to help chunk the information and ensure understanding

"Amphibians are a group of cold-blooded animals that include frogs, toads, newts and salamanders. They typically spend part of their life in water, part on land. They are distinct from reptiles in that their eggs must be laid in moist conditions and that their soft moist skins have no scales. The skin is slippery because there are special glands that produce mucus. This helps keep the very thin skin from losing too much water. This is one adaptation that allows amphibians to live even in very dry deserts. The larvae usually live in the water while the adults live on the land and are generally four-legged and carnivorous."

**Reptiles:**

Reptiles have dry, scaly skin. They breathe through their lungs. They are also cold-blooded. Most reptiles lay eggs, although certain snakes and lizards keep the eggs in their bodies until the young hatch. They are born live. Most reptiles live by eating other animals.



Guided Practice: (10 minutes)

Amphibian or Reptile?

- Post your sentence frames.
- Put one of the Amphibian and Reptile Picture cards under the document camera.

As a class, have the students practice using the sentence frames and the information they have learned about amphibians and reptiles to identify the correct category, amphibian or reptile, for this first picture. Help them explain their reasoning. How do they know?

- Put up another picture

Use the turn and talk strategy to have the students work with a partner to classify this animal using the sentence frames and the information in the graphic organizer.

- Call on several partnerships to identify the animal as an amphibian or a reptile and explain their reasoning using the sentence frames.

Continue with this procedure for each picture. Discuss each animal with the class. Correct any misconceptions.

- Answers:

Amphibians: frog, salamander

Reptiles: rattlesnake, gopher snake, lizard, tortoise

Independent Practice:(15 minutes)

Create a New Animal

- Have the students find a partner and decide who will be creating a reptile and who will do an amphibian.
- Give them paper—one piece for each—and art supplies.

Use the modeling cycle:

Teacher Does:

Use a puppet or other object to represent your partner. Decide who will do reptiles and who will do amphibians. Model how they can use their graphic organizer to create a new animal that has all of the correct characteristics. Quickly sketch one of them and ensure that it has all the characteristics labeled on your drawing. Show your partner doing the other one. When both are drawn, model how they can check each other's work to make sure everything needed is included.

Teacher and One Student Do:

Have a volunteer help you repeat the process, but do the artwork simultaneously. (And quickly!) Model checking the work.

Two Students Do:

Have 2 students repeat the process.

All Students Practice:

Have them work with their partners to create new animals and check their work.

Classify It!

Have the partners pair up with another set of partners and trade animals. See if they can tell which animal is a reptile and which is an amphibian. Have them use the sentence frames to do so.

Use the modeling cycle:

Teacher Does:

Use a puppet or other object to represent the other pair of partners. Use the characteristics on the graphic organizer to fill in the blanks in the sentences.

This is the amphibian because it _____, _____, and _____.

This is the reptile because it _____, _____, and _____.

Tell your partner if that was the correct answer or not.

Teacher and Three Student Do:

Have a volunteer help you repeat the process. Refer to the sentence frames.

Four Students Do:

Have 2 partnerships repeat the process. Refer to the sentence frames.

All Students Practice:

Students work with another pair to classify their new organisms using the sentence frames and their graphic organizers.

Closing: (5 minutes)

Revisit your objectives. Have them turn to their partners and list 2 amphibians found in Utah. Share them with the class. Then have them turn to their partners and list 4 reptiles that can be found in Utah. Share them with the class. Have 1 finger represent amphibians and two fingers represent reptiles. Hold up the amphibian and reptile cards and ask them to identify them with their fingers. Check if they can tell the difference.

Assessment:

Lab Sheet

Create a New Animal and Classify It Activities

Extra Ideas:

- In the English class, they can watch the Bill Nye on these animals!
- Give them more pictures of amphibians and reptiles and use them to practice classification. Make sure that you either use examples found in Utah, or specify to the students that you have used some that can't be found in Utah.

Amphibien und Reptilien, die man häufig in Utah sieht

Gophernatter



Frosch



Eidechse



Klapperschlange



Salamander



Schildkröte

