

Lesson Title: Jimmy's Amazing Amphibian Adventure!

Materials Needed:

- **For Activity 1 (Life Cycle Spinner):** A paper plate, a brass fastener (brad), a piece of cardstock or a second paper plate, scissors, crayons or markers, a ruler.
- **For Activity 2 (Build-a-Frog-Home):** A shoebox, blue construction paper, brown or green modeling clay or play-doh, small rocks or pebbles, twigs and leaves (from outside!), small plastic insects (optional), glue, tape.
- **For Activity 3 (A Frog's Diary):** A notebook or several sheets of paper stapled together, a pencil, colored pencils or markers.
- **For Engagement:** Computer or tablet for a short video.

Lesson Plan Details

Subject: Science (Life Science), Language Arts, Art

Student: Jimmy (Age 8)

Time Allotment: 60-90 minutes (can be broken up)

1. Learning Objectives

By the end of this lesson, Jimmy will be able to:

- **Create** a model that accurately illustrates the four main stages of the frog life cycle.
- **Design and build** a diorama of a suitable frog habitat, explaining how each element meets a frog's needs for survival (water, food, shelter).
- **Write and illustrate** a creative short story from the perspective of a frog, demonstrating an understanding of its environment and behaviors.

2. Lesson Procedure & Activities

Part A: The "Hook" - What's Hopping? (5 minutes)

Let's start by getting excited about frogs! Watch a short, fun video together of a frog in action, like National Geographic's "Leaping, Flying, and Sticky Frogs."

After the video, ask some fun questions:

- "What was the coolest thing that frog did?"
- "Did you know frogs don't start out looking like that? Where do you think they come from?"

Part B: Activity 1 - The Wheel of Change! (15-20 minutes)

Instead of just talking about the frog life cycle, let's build it!

1. **Prepare the Plate:** Take the paper plate and use a ruler to divide it into four equal "pizza slice"

sections.

2. **Draw the Cycle:** In each section, Jimmy will draw one stage of the frog's life. Help him label them in order:
 1. **Eggs:** A cluster of jelly-like eggs in water.
 2. **Tadpole:** A little swimmer with a long tail.
 3. **Froglet:** Growing legs, but still has a tail.
 4. **Adult Frog:** The final frog, ready to hop!
3. **Create the Cover:** Take the cardstock (or second paper plate) and cut out a circle the same size as the first plate. Cut one "pizza slice" out of this cover piece. This will be our viewing window.
4. **Assemble:** Place the cover over the life cycle plate. Poke the brass fastener through the center of both pieces and secure it. Now, Jimmy can spin the top wheel to reveal one stage of the life cycle at a time and explain what's happening in that stage!

Part C: Activity 2 - Build-a-Frog-Home Diorama (25-30 minutes)

Now that we know how a frog grows up, where does it live? It's time for Jimmy to become a frog habitat architect!

1. **The Foundation:** Lay the shoebox on its side. This is our "world."
2. **Add the Pond:** Use blue construction paper or blue modeling clay to create a pond on one side of the shoebox floor. This is essential! Ask Jimmy, "Why does a frog need water?" (To stay moist, lay eggs, find food).
3. **Create the Land:** Use brown/green modeling clay or construction paper for the land area next to the pond.
4. **Add Shelter and Details:** Use the natural materials!
 - **Twigs and Leaves:** Can be used to create a log or a leafy area for the frog to hide under. Ask, "Why would a frog need to hide?" (From predators like birds or snakes).
 - **Small Rocks:** Can be placed in the "pond" or on the land for the frog to sunbathe on.
5. **Don't Forget Lunch!** If you have them, add a few small plastic insects near the pond. If not, Jimmy can draw some flies on the wall of the shoebox.
6. **The Grand Tour:** When he's done, have Jimmy give you a tour of his habitat, explaining why he included each element.

Part D: Activity 3 - A Frog's Diary (15-20 minutes)

Let's combine science with storytelling! Jimmy is now going to pretend he is a frog living in the habitat he just built.

1. **The Prompt:** "Dear Diary, Today was a very busy day in my pond..."
2. **Writing Time:** Encourage Jimmy to write a short story about his day. What did he eat? What did he see? Did he have to hide from a predator? Did he swim in his pond or hop onto a log?
3. **Illustrate:** After writing, he can draw a picture to go with his diary entry. This is a great way to express his ideas visually.

3. Differentiation & Extensions

- **For Extra Support:** If writing is a challenge, Jimmy can dictate the diary entry to you while he draws the picture. You can also provide sentence starters like, "First, I ate a...", "Then, I hid under..."
- **For an Extra Challenge:** Research a specific type of frog together (like a Red-Eyed Tree Frog or a Poison Dart Frog). Then, challenge Jimmy to adapt his habitat diorama and diary entry to fit the unique needs and environment of that specific frog.

4. Assessment (Fun & Informal)

We'll check for understanding through the creations!

- **Life Cycle Spinner:** Can Jimmy turn the wheel and correctly name and describe each of the four stages?
- **Habitat Diorama:** During his "grand tour," does he explain how the elements (water, shelter, food source) help a frog survive?
- **Frog's Diary:** Does his story include details that show he understands a frog's life and environment (e.g., eating bugs, swimming, hiding)?

5. Wrap-Up & Closure (5 minutes)

Let's finish by talking about being a friend to frogs.

Ask a final thought-provoking question: "Now that you know what frogs need to live, what is one thing we could do in the real world to help protect frog habitats?" This connects the lesson to real-world conservation and empowers him to think like a scientist.

Display Jimmy's amazing creations—the spinner, the diorama, and his story—proudly!