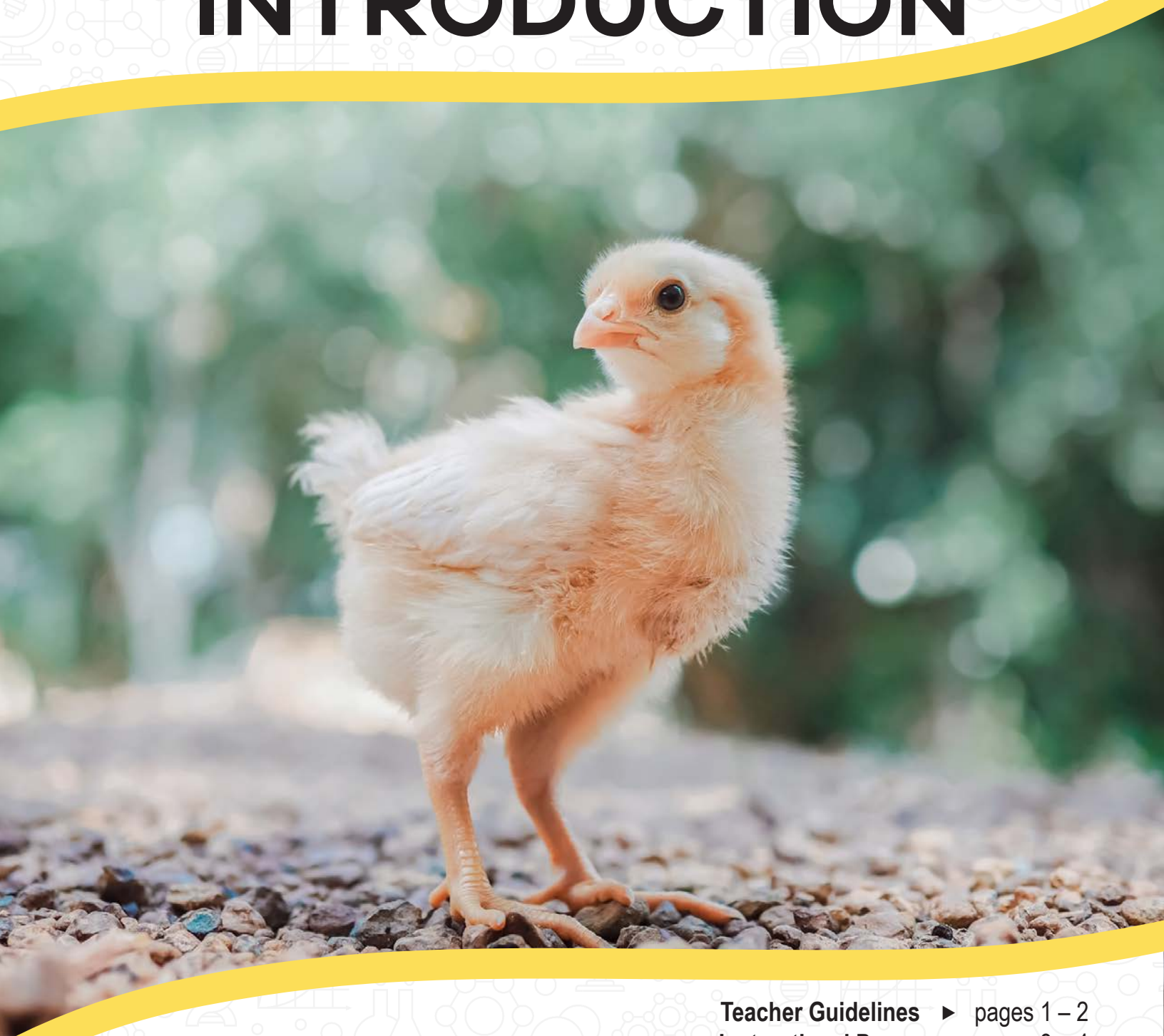
Learn BRIGHT

ANIMAL LIFE CYCLES INTRODUCTION



GRADE 2-3

Classroom Procedure:

1. Introduce the lesson by drawing a picture of a child. Ask students which stage came before the one they are in now and which one will go after. Write it on the board. Ask students if they know the name for the stages an animal goes through from birth to death. [Answer: life cycle]
2. Distribute *Animal Life Cycles Introduction* Content Pages.
3. Distribute the Activity Page. Have students share their life cycle gloves with the class or in small groups.
4. Distribute the Practice Page.
5. Distribute the Homework Page. Review students' life cycles the next day.
6. In closing, ask students what would happen if the life cycle did not repeat. What could cause the life cycle to not repeat?

Lesson Title: Animal Life Cycles Introduction

Subject: Science

Approximate Grade Level: 2 – 3

Objectives: Students will explore various life cycles for different types of animals. They will learn how life cycles for animals differ for other species.

State Educational Standards*:
LB.NGSS.3-LS4
LB.NGSS.3-LS4-3
LB.NGSS.5.LS2

Class Sessions (45 minutes):
2 class sessions

Teaching Materials/Worksheets:
Content Pages (2), Activity Page (1), Practice Pages (2), Homework Page (1)

Student Supplies:
Pencils, pens, highlighters, dish glove, scrap paper, beads, tissue paper, other craft materials, internet access

Prepare Ahead of Time:
Copies of worksheets; craft items for activity

Options for Lesson:
Place students in groups and have each group create a puppet show of the life cycle for a different animal. If possible, have a veterinarian come in and discuss the life cycle of various animals with students. Have the veterinarian discuss the changes from each life stage with students and, if possible, bring in live animals.

*Lessons are aligned to meet the education objectives and goals of most states. For more information on your state objectives, contact your local Board of Education or Department of Education in your state.

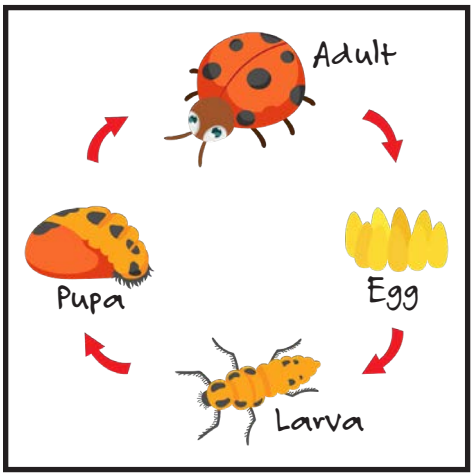
Teacher Notes

In this lesson, students will explore the life cycles of various animals. From birds to reptiles to humans, they will see how the life cycle works and understand that it continues throughout generations. Students will have a chance to be creative as they make their own life cycle on a glove and research the life cycle of their favorite animal.

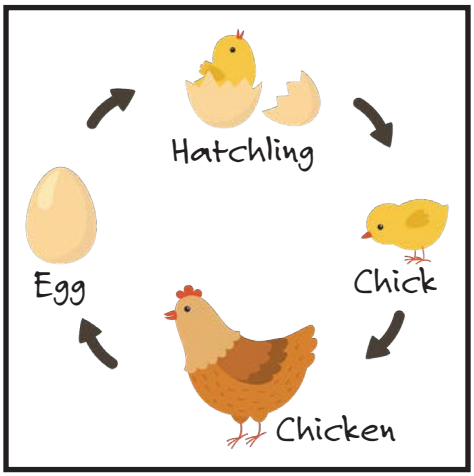
Animal Life Cycles Introduction

A life cycle is a series of stages that describes how a living thing develops, lives, and dies. Every animal goes through a life cycle, beginning with birth, then changing to an adult, and eventually ending with death. Each **generation** goes through these changes. When each series of stages is complete, it is called a life cycle.

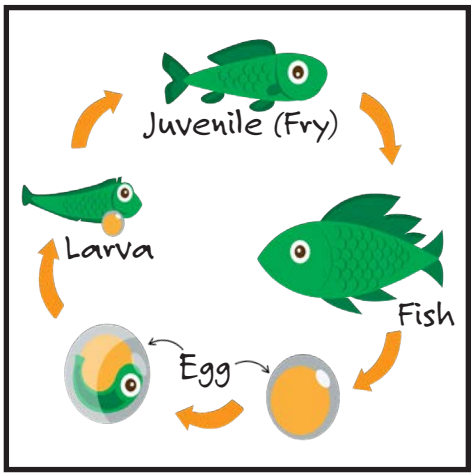
INSECTS



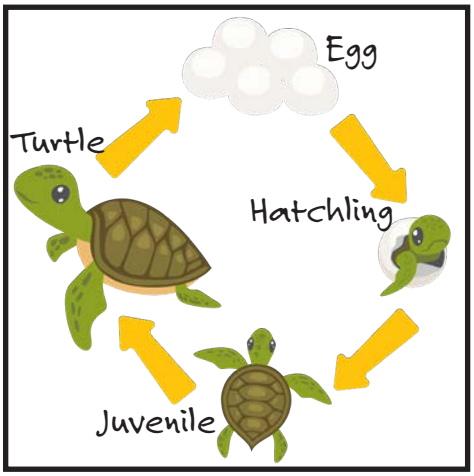
BIRDS



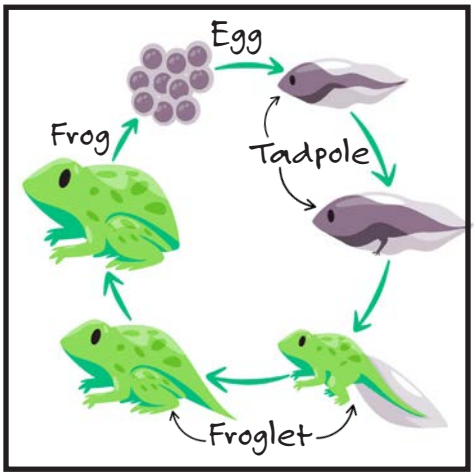
FISH



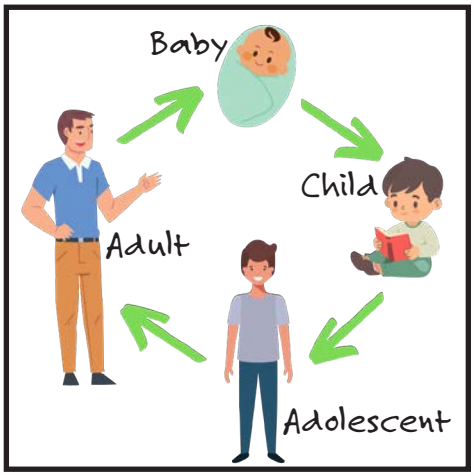
REPTILES



AMPHIBIANS



MAMMALS

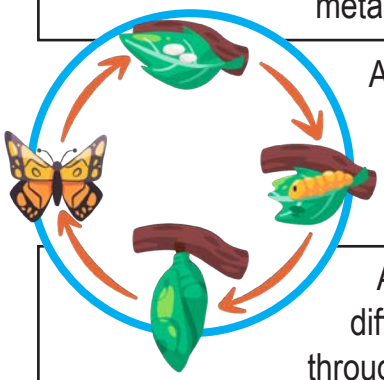


Life cycles repeat over and over again. For this reason, you could also call this concept the circle of life. Seeing the pattern in a circle can help us understand that the life cycle repeats itself over and over again.

Insects and most amphibians change quite a lot throughout their life cycles. They go through a process called **metamorphosis**. Metamorphosis is a significant change in the body form of an animal during its life cycle. Sometimes there are three basic stages (called incomplete metamorphosis), but most of the time there are four (complete metamorphosis).

Let's discuss some examples.

An adult grasshopper lays eggs in the soil. Young grasshoppers, called **nymphs**, hatch from the eggs. As a nymph grows, it sheds its outer body covering several times before becoming an adult. It goes through incomplete metamorphosis: egg, nymph, and adult.



Adult butterflies lay their eggs on leaves. From each egg, a caterpillar hatches and starts to eat, and eat, and eat. The caterpillar then forms a **chrysalis**. An adult emerges from the chrysalis as an adult butterfly. It experiences complete metamorphosis: egg, caterpillar (**larva**), chrysalis (**pupa**), and adult.

And just like many insects, most amphibians look entirely different at each stage of their lives. Only a few species don't go through metamorphosis. Most frogs, for instance, lay eggs that hatch into **tadpoles**. The tadpoles develop into **froglets**, and froglets grow into adult frogs. So they go through complete metamorphosis: egg, tadpole, froglet, and adult frog.

Reptiles, fish, birds, and mammals don't go through metamorphosis. Reptiles, fish, and birds lay eggs, and mammals generally have live births. Because of this, these baby animals don't look all that different from their parents.

For example, a baby fish is clearly a fish. Hatchling turtles look like miniature versions of adult turtles. Ducklings look similar to adult ducks right after they hatch, too. And human babies look like adults, only smaller and less hairy. While their life cycles might be different, all animals go through the continuous circle of life.

Activity **Name** _____ **Date** _____

LIFE CYCLE GLOVES

Supplies: Dish glove, scrap paper, beads, tissue paper, other craft materials

Instructions: Follow the steps to create a life cycle glove for a specific animal.

STEP 1: Choose a reptile, bird, insect, mammal, fish, or amphibian.

My animal: _____

STEP 2: Research the life cycle of your animal.

- If the animal has 5 or fewer stages, use one glove.
- If the animal has more than 5 stages, you will need two gloves.

STEP 3: Draw one stage per finger on your glove.

- You can design each stage using any materials available. Be creative, but make sure it looks like the correct stage!

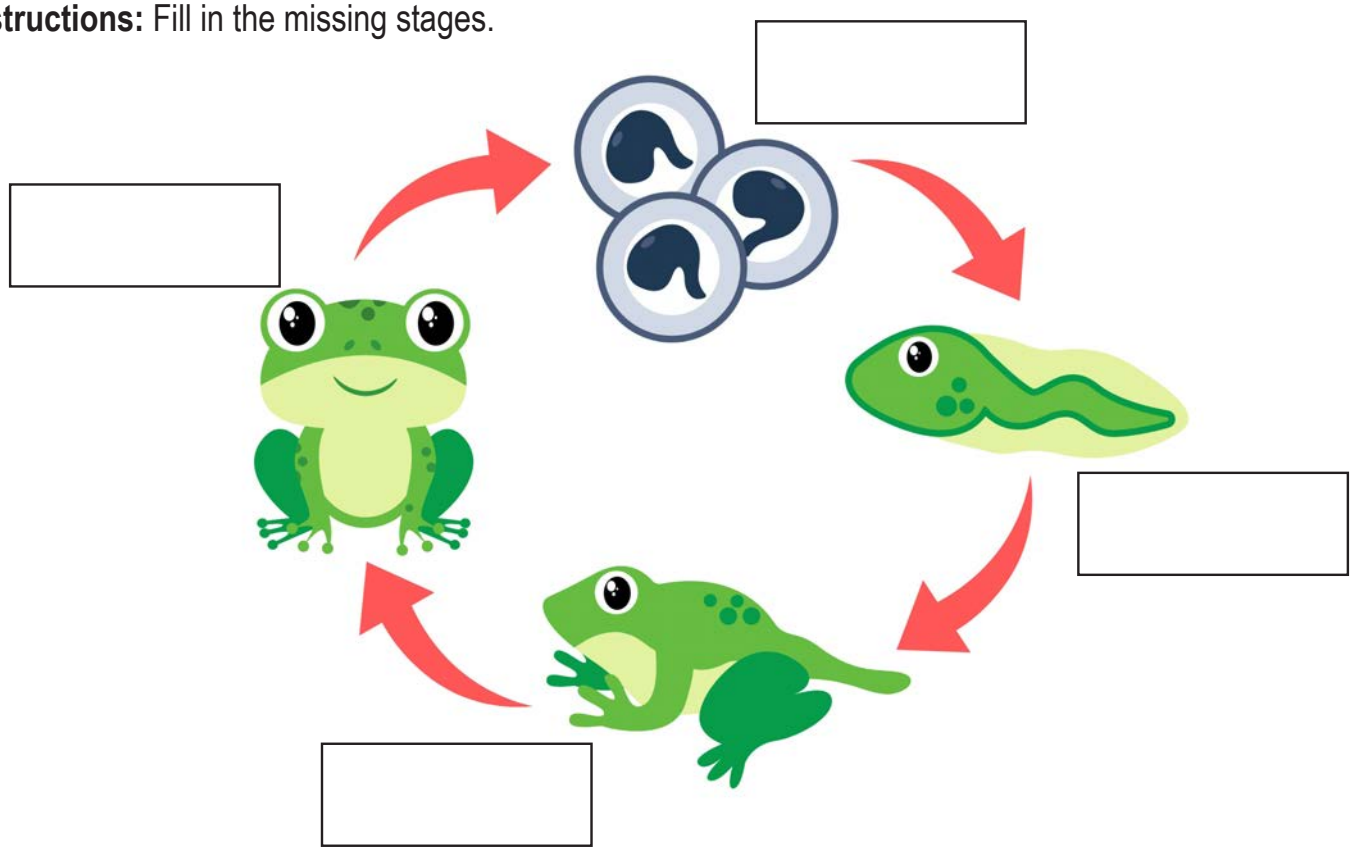
STEP 4: Label each stage by writing its name on the correct finger.

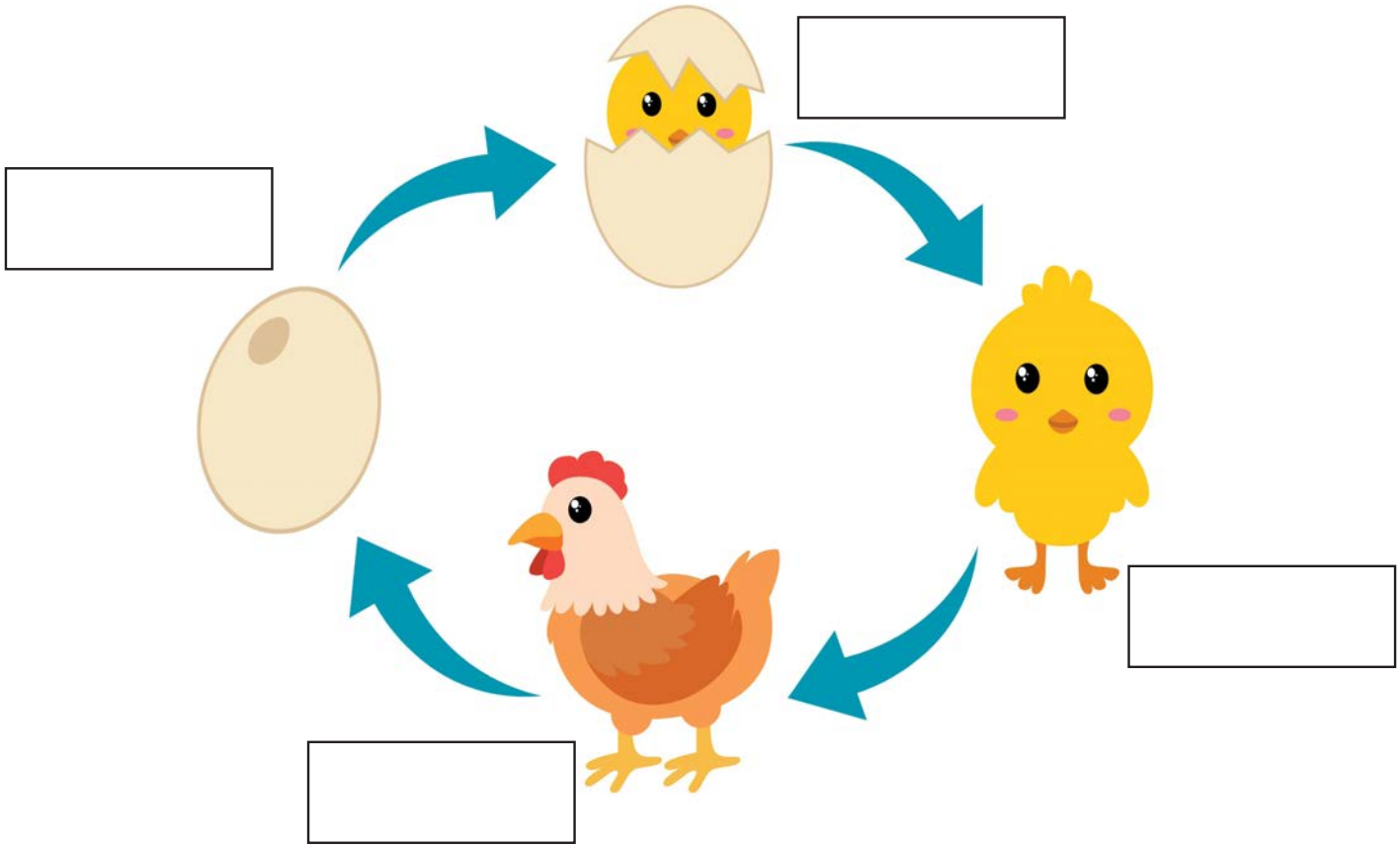
Use the box below to sketch rough drafts for your finger stages before you draw on your glove.

Practice

Name _____ Date _____

Instructions: Fill in the missing stages.





Homework

Name _____ **Date** _____

Instructions: Choose your favorite animal. List 3 fun facts about your animal. Draw the life cycle of your animal in the box below. Label each stage.

My favorite animal is a _____.

Fact 1: _____

Fact 2: _____

Fact 3: _____

Practice

Name Answer Key Date _____

Instructions: Fill in the missing stages.