Mighty Mammals
1st Grade

Duration

Pre-Visit: 30 minutes

Museum Visit: 30 minutes

Post Visit: 30 minutes

Location

Age of Mammals Hall

Supplies

- Worksheet
- Pencil
- Clipboard (optional)

Standards

NGSS

1-LS1-1, 1-LS1-2, 1-LS3-1, LS1.A, LS1.B LS3.A, LS3.B, LS4.D,

S+E Practices

2, 3, 4, 6, 7, 8

CCSS ELA

SL1.a.b.c, SL5, L.5.c

CA State

ELA Grade 1

Writing Strategies 1.2

Writing Applications 2.2

Science Grade 1

Investigation and Experimentation 4.a

Vocabulary

Mammal · Characteristics · Fur

🔍 *Student Work*

Concepts

- Scientists use descriptive words and drawings to record observations.

- Animals are grouped by a set of common characteristics.

Objectives

- Students will carefully observe mammals and use descriptive words and sensory details to record observations.

- Students will draw pictures that portray some features of the thing being described.

- Students will be able to identify mammals from other kinds of animals.

Outline

1. In one classroom session before visiting the Museum, review the characteristics of mammals and complete a Know, What, Learn chart.

2. During a trip to the Museum explore and practice observation using descriptive words, complete the worksheet and reflect and review on the lesson.

3. Back in the classroom, review and reflect on what was learned.

Pre-Visit

In your classroom, distribute the *Mammals!* worksheet and have students observe the pictures of the Cheetah and it's skeleton. Ask students, "what do you notice about this animal?" Have them share responses and make sure they use descriptive words as they do.

Introduce the essential question: What is a mammal? Go through the mammal characteristics below, having the student's circle each characteristic as you talk about it (white crayons may work best for this).

Visible mammal characteristics (see teacher cheat sheet below)
- Fur or hair
- Seven bones in their neck
- A single lower jaw bone

Briefly, talk about mammal characteristics we can't see on the outside or a skeleton, but can be noticed or observed by watching an animal:
- Mammals make their own body heat
- They all have sweat glands (modified sweat glands, called mammary glands, make milk for young)

Teachers note: there are other characteristics that identify animals as mammals, however they may not be an appropriate level of content for your students. If you choose to include them, they are the presence of specialized teeth, a 4-chambered heart, 3 ear bones and they are the only vertebrate with a diaphragm.
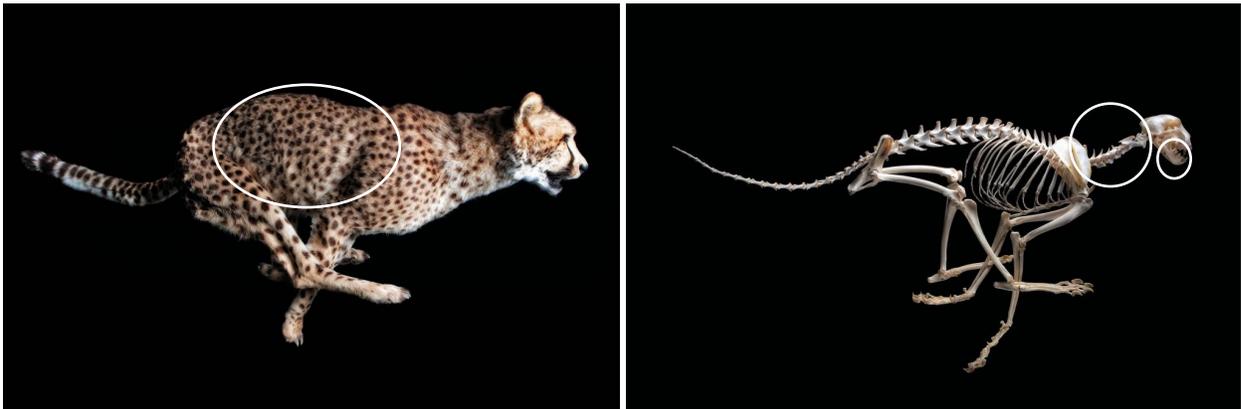
Next, activate prior knowledge by asking students: "What are some mammals you know?" Write the list of mammals students come up with on the board, then choose one to draw a picture of. Students should label the pictures with descriptive words. Save the list, it will be added to during the reflection portion of this lesson.

Finally, use easel paper to begin a KWL chart (What do you <u>know</u>? What do you <u>want</u> to know? What did you <u>learn</u>?). Ask students the following questions: "What do you know about mammals? What do you want to know about mammals? What have you learned about mammals?" Record the students' responses on the chart.

Museum Visit

At the Museum, gather students in front of the Cheetah in the Age of Mammals Hall (first display to the left as you enter). Remind students why this animal is a mammal (have fur or hair, seven neck bones, single bone in the lower jaw, etc.).

Ask students to think about what they notice about the cheetah they are observing. They can talk about the size, color, texture and shape of the cheetah. Model a response for students, such as: "The _____ is a mammal and it has _____."

Next, have students explore the Age of Mammals Hall in pairs and look around at all the different display cases. In order to describe the mammals they will be observing, the students can practice describing out-loud using the model provided earlier — "This _____ is a mammal because it has _____" *(teacher provides name of animal)*.

Post-Visit

Once you're back in the classroom, revisit the KWL chart from the Pre-Visit activity. Ask students: "What did you learn about mammals?" Discuss what students learned and add to chart. Use this as an opportunity to review and clarify mammal characteristics and clarify misunderstanding.

Next, with the students add mammals that were observed in the Age of Mammals hall to the list of mammals above. Model the next worksheet activity by picking one or two mammals from the list and writing a poem about them with the whole class. Structure the poem as follows:

_____ are mammals!

They have _____ *(adjective)* _____ *(noun)*.

_____ *(sound of the animal)*!

Use descriptive words and sounds. An example of the poem could be:

Lions are mammals!
They have a bushy mane of fur.
Roar!

Optionally, as an additional reflection exercise (this worksheet could also be completed as homework both prior to or after the Museum visit) have students complete the *Review and Reflect* worksheet.

Variations & Extensions

- Students can do a comparison drawings showing a mammal and a non-mammal.

- Have students make imaginary mammals, either as a craft activity or drawing/painting activity. Students can present (show and tell style) their animals and describe why their imaginary animal is a mammal.
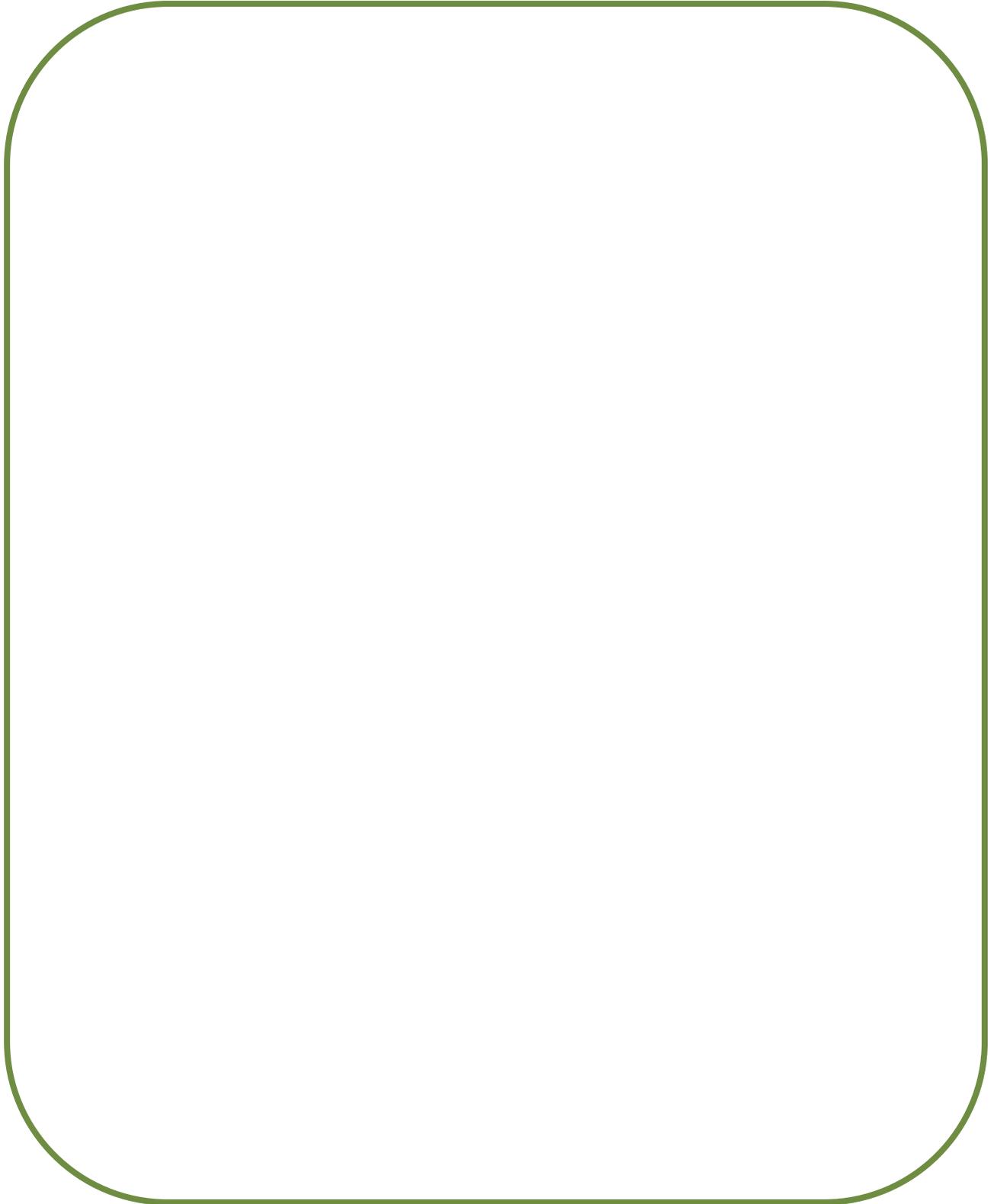
Mammals!

Observe the Cheetah and it's skeleton below. What do you notice?
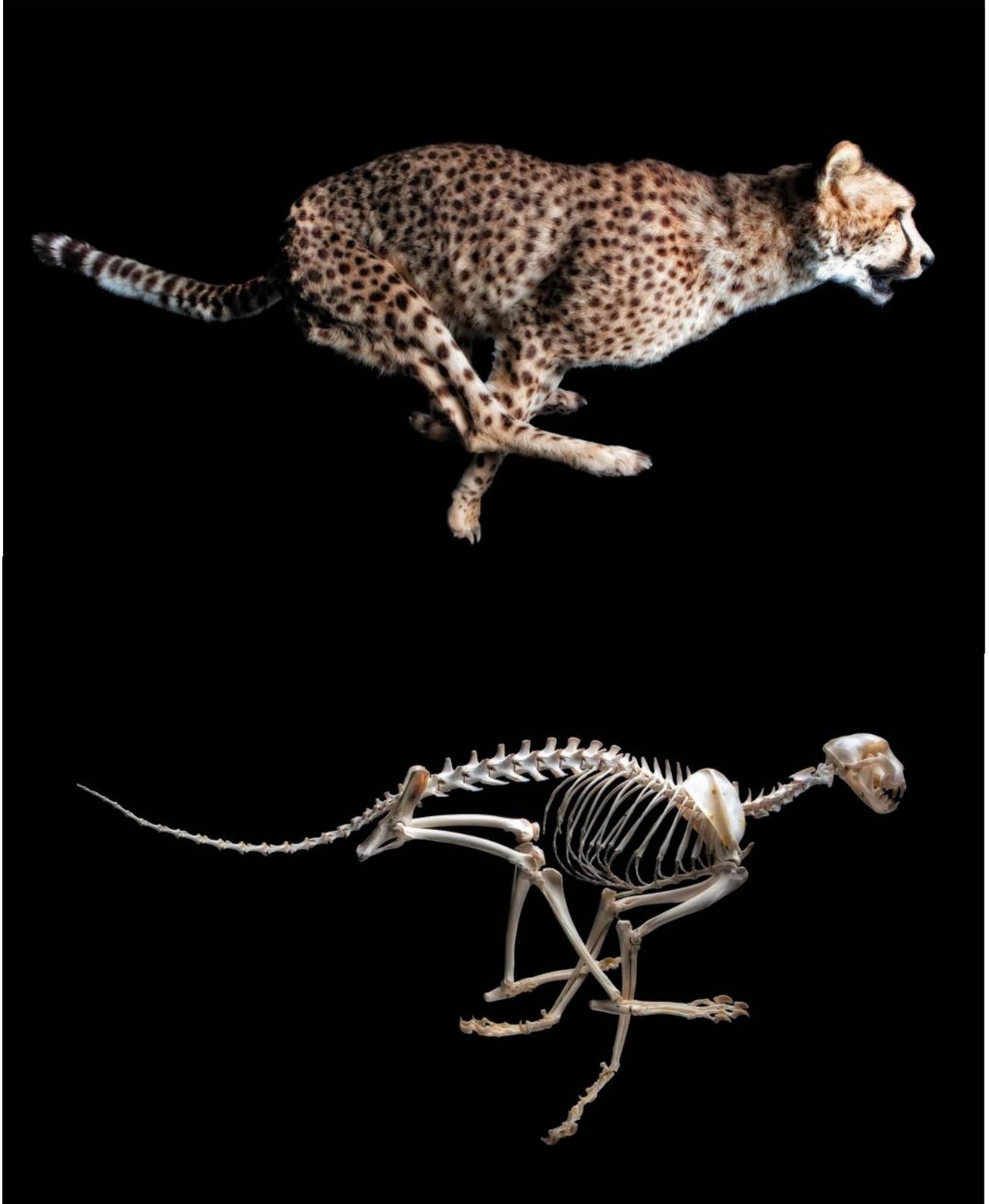
My Mammal!

Pick a mammal and draw a picture of it below! Label it with 2 things that tell you it's a mammal.

My Mammal Poem

Use the space below to write a poem about your mammal!

_____ are mammals!

(name of mammal)

They have…

_____

_____

(Describe with an adjective and noun)

and go…

_____!

(sound of mammal)

Reflect and Review

Draw your favorite mammal below in the middle box. Then name and draw the characteristics that tell you it is a mammal in the four boxes around it.

...it has _____

...it has _____

My favorite mammal is a mammal because...

...it has _____

...it has _____