

Second Grade **Science**, Spring 2021

MYSTERY science

Animal Adventures

STUDENT
PACKET

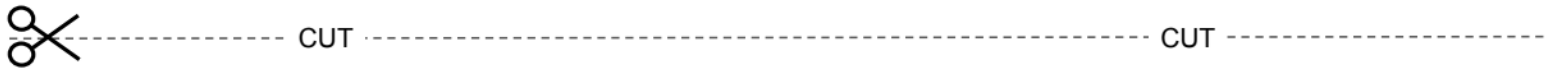


Design a Bat Rest Stop

MYSTERYscience
Animal Adventures | Anchor Layer

Name: _____ Design Number: _____

What would you use to build
your Bat Rest Stop?



Design a Bat Rest Stop

MYSTERYscience
Animal Adventures | Anchor Layer

Name: _____ Design Number: _____

What would you use to build
your Bat Rest Stop?



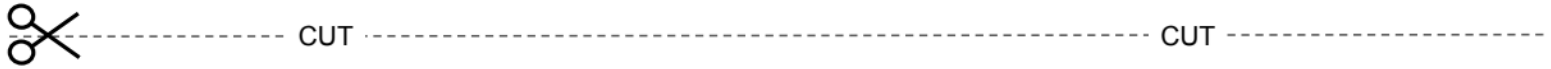
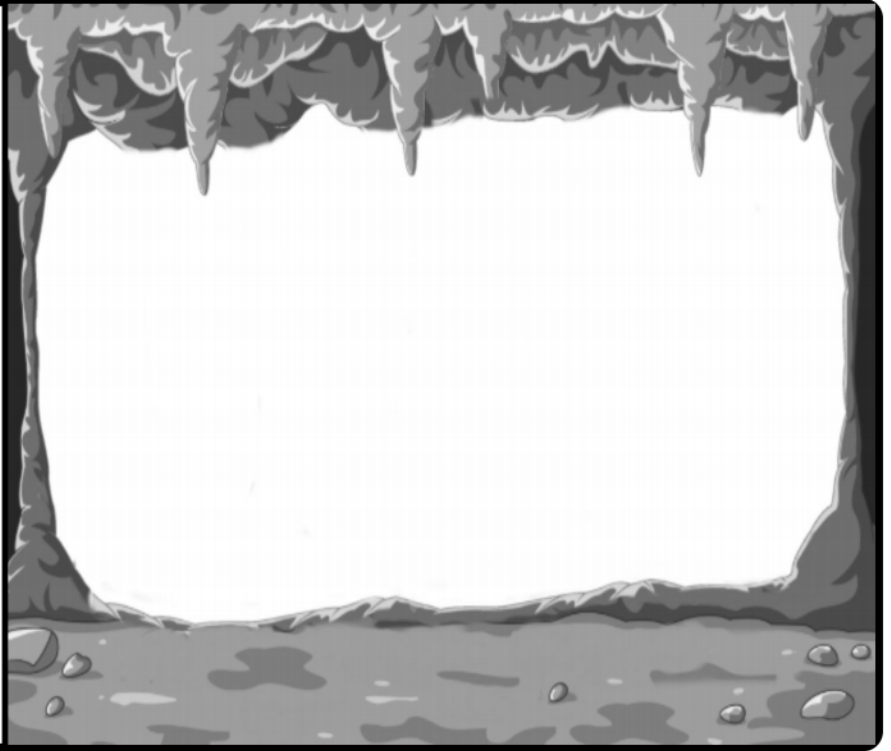
Bracken Cave

MYSTERYscience
Animal Adventures | Anchor Layer

Name: _____ Drawing Number: _____

What do you think
lives in the cave?

I think it is



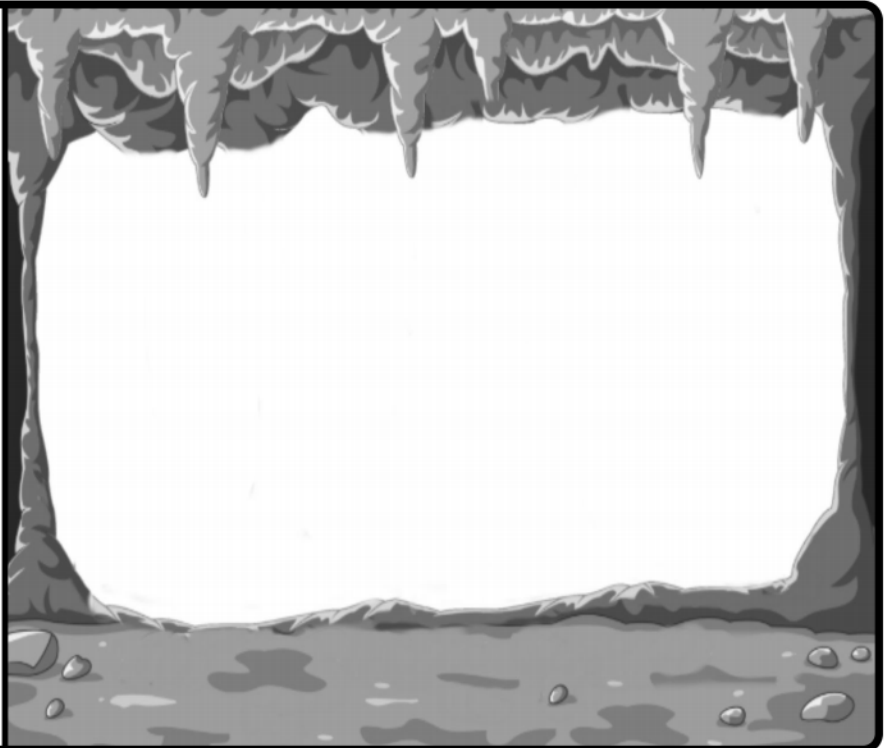
Bracken Cave

MYSTERYscience
Animal Adventures | Anchor Layer

Name: _____ Drawing Number: _____

What do you think
lives in the cave?

I think it is





Penguin

Has bones inside its body



Lays eggs



Has feathers



MYSTERYscience



Squirrel

Has bones inside its body

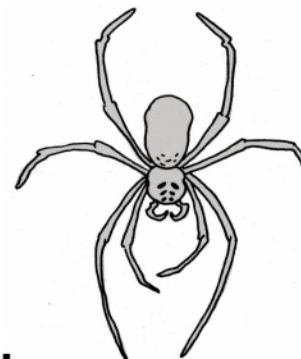


Gives birth (doesn't lay eggs)

Has hair or fur



MYSTERYscience



Spider

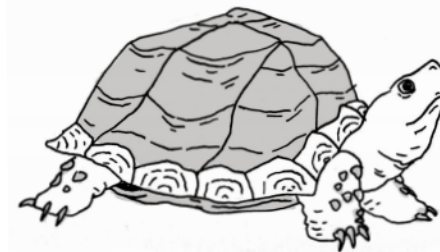
Doesn't have any bones at all

Lays eggs



Doesn't have fur or feathers or scales

MYSTERYscience



Turtle

Has bones inside its body



Lays eggs



Has scales



MYSTERYscience



Ladybug

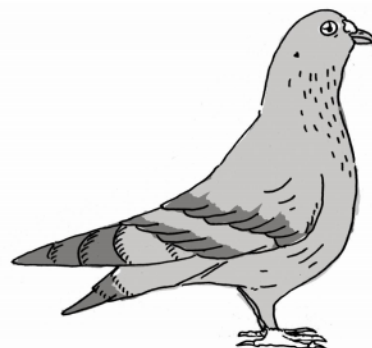
Doesn't have any bones at all

Lays eggs



Doesn't have fur or feathers or scales

MYSTERYscience



Pigeon

Has bones inside its body



Lays eggs



Has feathers



MYSTERYscience



Snake

Has bones inside its body

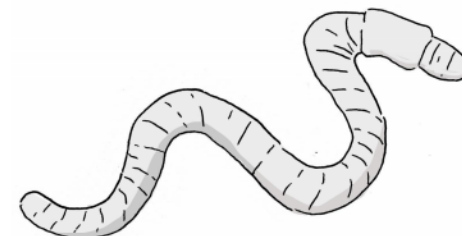
Lays eggs



Has scales



MYSTERYscience



Earthworm

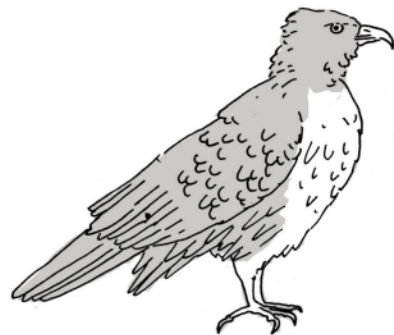
Doesn't have any bones at all

Lays eggs



Doesn't have fur or feathers or scales

MYSTERYscience



Hawk

Has bones inside its body



Lays eggs



Has feathers



MYSTERYscience



Bat

Has bones inside its body



Gives birth (doesn't lay eggs)

Has hair or fur



MYSTERYscience



Monarch butterfly

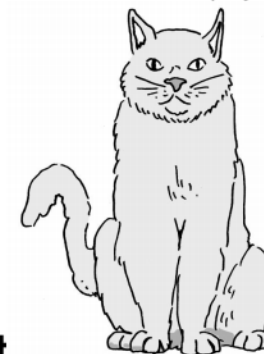
Doesn't have any bones at all

Lays eggs



Doesn't have fur or feathers or scales

MYSTERYscience



Cat

Has bones inside its body

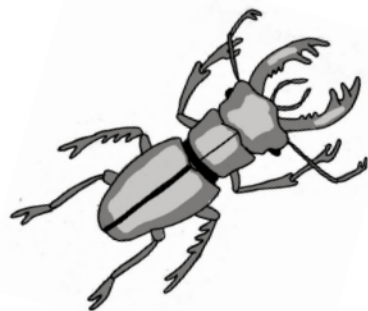


Gives birth (doesn't lay eggs)

Has hair or fur



MYSTERYscience



Elephant stag beetle

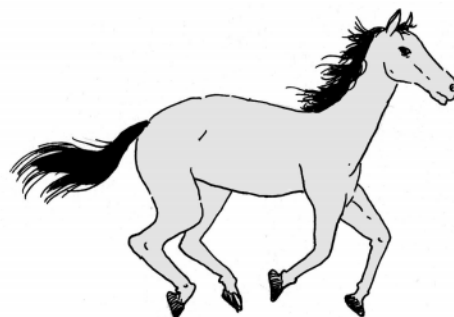
Doesn't have any bones at all

Lays eggs



Doesn't have fur or feathers or scales

MYSTERYscience



Horse

Has bones inside its body

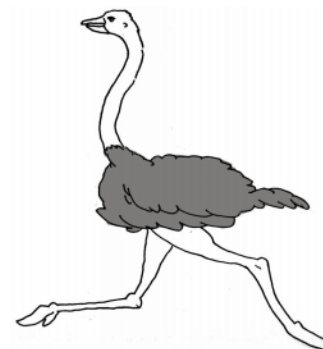


Gives birth (doesn't lay eggs)

Has hair or fur



MYSTERYscience



Ostrich

Has bones inside its body



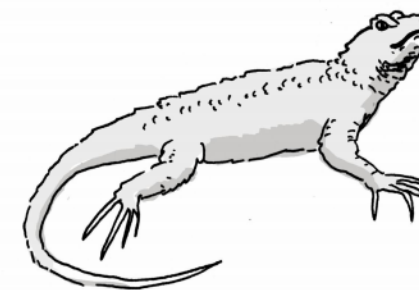
Lays eggs



Has feathers



MYSTERYscience



Lizard

Has bones inside its body



Lays eggs

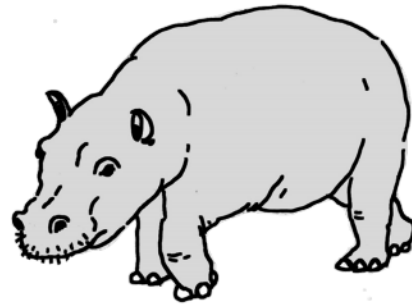


Has scales



MYSTERYscience

Challenge Cards



Name: _____

bones / no bones

lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience



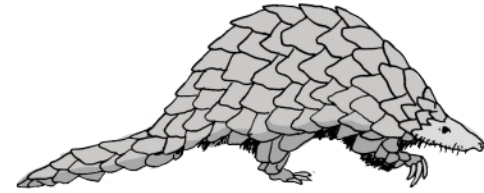
Name: _____

bones / no bones

lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience



Name: _____

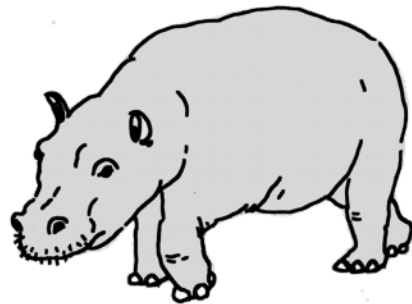
bones / no bones

lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience

Challenge Cards



Name: _____

bones / no bones

lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience



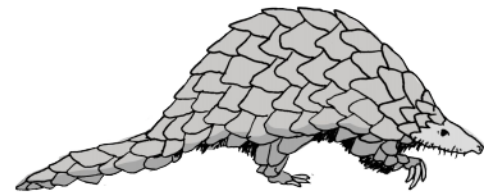
Name: _____

bones / no bones

lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience



Name: _____

bones / no bones






lays eggs / gives birth

hair / feather / scales / none

MYSTERYscience

Who's Calling?

1. Learn to identify frogs by their calls:

	Kind of frog	Write a few words to remind yourself of what it sounds like.
	Wood Frog	
	Spring Peeper	
	American Bullfrog	
	Northern Leopard Frog	
	American Toad	

2. What kind of frog do you hear in Challenge #1?

3. What kind of frog do you hear in Challenge #2?

How Many Kinds of Frogs?

4. Listen to which kinds of frogs each place has:

OAKWOOD POND

In spring, this tiny pond is a shallow puddle in the woods. In summer, it dries up. There are no flowing streams or swamps here.

Oakwood Pond: check off what kinds of frogs you hear

Wood Frog	
Spring Peeper	
American Bullfrog	
Northern Leopard Frog	
American Toad	

SWEDE LAKE

This lake has swampy places with many plants, places with shallow water, and streams flowing into the lake. There's water here all year long.

Swede Lake: check off what kinds of frogs you hear

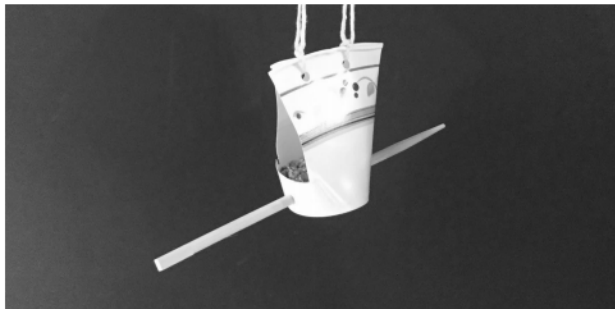
Wood Frog	
Spring Peeper	
American Bullfrog	
Northern Leopard Frog	
American Toad	

5. Which place has more kinds of frogs?

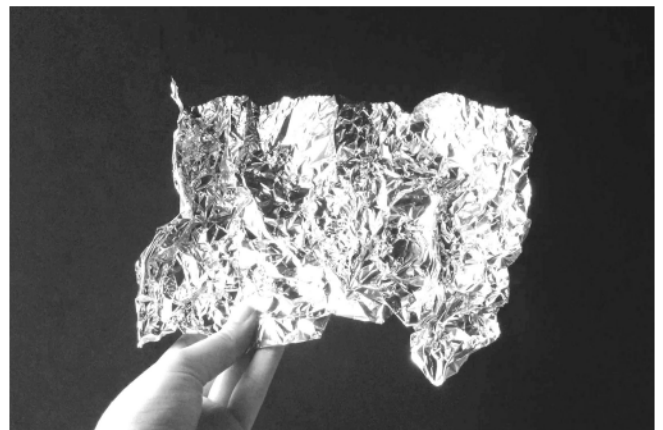
My claim is that _____ has more kinds of frogs. My evidence is that _____

Bird Feeder Inspiration

A stick or pencil through two holes can make a perch for birds to stand on.



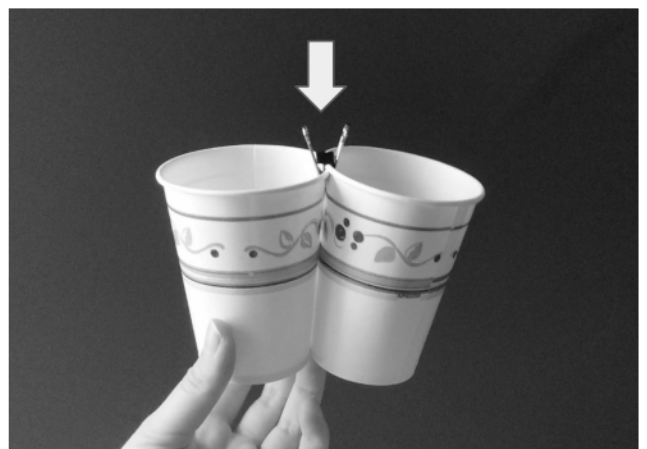
You can scrunch aluminum foil into any shape you want.



Push a pipe cleaner through a hole and use it to hang up your bird feeder:



A binder clip can hold things together. It also gives you a place to tie a pipe cleaner:



My Bird Feeder

Name: _____

1) Discuss what your bird feeder needs:

1a) What kind of bird do I want to come to my feeder? _____



Finches

- Eat seeds
- Like to stand on a peg while eating



Jays

- Eat seeds
- Like to stand on a tray while eating



Woodpeckers

- Eat seeds and bugs
- Like to hang on the sides of feeders to eat



Cardinals

- Eat seeds
- Like to stand on a tray while eating

1b) What does that bird eat? _____

1c) Where does the bird like to stand when it eats? _____

1d) How can my feeder keep birds safe from cats? _____

2) Fill in the blanks to write your problem statement:

I want _____ to come to my yard. I need a bird feeder with _____ and
(kind of bird) (kind of food)

_____ for my bird to stand on. I will make the bird feeder safe from cats by _____
(place to stand)

_____.

Name: _____

3) Here are my ideas for a bird feeder:

Draw at least two ideas for bird feeders. Be sure you show:

- Where will the food be?
- Where will the birds stand?
- What will keep the birds safe from cats?

Use the back of the page to draw any more ideas.

Idea #1



Idea #2



4) I've built my prototype. What next?

A real bird feeder needs to hold together in wind and rain. What materials could you use to make a real feeder that's like your prototype?

Martin's Birdhouse

by Rachelle Kreisman



Drawing a picture can be fun. Drawing can also help people communicate. Putting an idea on paper is sometimes a good way to solve a problem.

Here is an example. Martin wanted to build a new birdhouse. The last one he had built fell apart after one windy night. This time, Martin knew he had to make a stronger birdhouse. He just was not sure how to do that.

Martin asked his friend Diego for help. Diego was good at building things. Martin explained his idea about the birdhouse, but Diego was confused. So Martin drew a picture to show what he was thinking.

Diego looked at the sketch carefully. "Why does the hole for the bird need to be so big?" he asked Martin. "It doesn't," said Martin. "You're right." Diego

also suggested that the birdhouse could be attached to the tree in a much better way. He drew another picture to show Martin how that attachment would work.

After talking a while longer, Martin and Diego drew one more sketch. Then they began building the birdhouse together. "We are a good team," Martin told Diego. "I think your ideas will make my birdhouse stronger!"

Name: _____ **Date:** _____

1. What does Martin want to build?

- A. a tree house
- B. a birdhouse
- C. a dog house

2. When in the story do Martin and Diego begin building a birdhouse together?

- A. in the middle of the story
- B. at the end of the story
- C. at the beginning of the story

3. Martin says that he and Diego are a good team.

What evidence from the story supports the idea that Martin and Diego are a good team?

- A. The last birdhouse Martin built fell apart, so he asks his friend Diego for help.
- B. Martin and Diego communicate and work together to make the birdhouse stronger.
- C. Martin explains his idea about the birdhouse to Diego, but Diego is confused.

4. What does the first picture that Martin draws probably show?

- A. a bird
- B. Diego's face
- C. a birdhouse

5. What is the theme of this story?

- A. Diego is good at building things.
- B. Drawing a picture can help people communicate.
- C. The last birdhouse Martin built fell apart after a windy night.

6. Read these sentences from the story.

"Martin explained his idea about the birdhouse, but Diego was confused. So Martin drew a picture to show what he was thinking.

"Diego looked at the sketch carefully. 'Why does the hole for the bird need to be so big?' he asked Martin."

What does the word "sketch" mean here?

- A. book
- B. picture
- C. sentence

7. Choose the answer that best completes this sentence.

Martin asks Diego for help _____ he wants to build a stronger birdhouse.

- A. so
- B. because
- C. but

8. How does Diego feel when Martin first explains his idea about the birdhouse?

9. What does Martin do to show Diego what he is thinking?

10. How can drawing help people communicate? Support your answer with evidence from the story.

Warm-Blooded and Cold-Blooded Animals

This text is excerpted from an original work of the Core Knowledge Foundation.

Many animals-such as cats, mice, rats, cows, elephants, tigers, and even people-belong to a group called mammals. So, you and I are mammals! All mammals have hair, but some have more hair, or fur, than others. You have to get pretty close to an elephant to see its hair, but it is a mammal.

Another characteristic of mammals is that they give birth to live babies. Mammal babies begin breathing, moving, and looking for food as soon as they are born. Mammal mothers make milk to feed their newborns. This is another key characteristic of all mammals.



Mammal mothers feed their babies milk from their bodies.

Do you think this crocodile is a mammal?

Answer: No!

Why not?

Crocodiles have scales, not hair or fur.

Crocodiles lay eggs and baby crocodiles hatch from those eggs.

A baby crocodile does not get milk from its mother. Its first meal might be a bug. Later, he'll eat bigger animals.

Crocodiles belong to a different group of animals called reptiles, along with snakes, lizards, and turtles.



Crocodiles, snakes, lizards, and turtles are all reptiles.

Scientists also classify, or group, animals as mammals or reptiles based on how the animals

control their body temperature. All animals need to keep a constant temperature inside their bodies for their bodies to work properly. If an animal gets too hot or too cold, its body will not work the way it should. An animal may become sick or even die.

Mammals are warm-blooded animals. When warm-blooded animals are in a cold place, they use energy from food they eat to help keep their bodies warm. Some warm-blooded animals shiver to keep warm. When they shiver, their bodies make heat to keep warm.



When a person shivers, his/her body is using energy to keep him/her warm.

When warm-blooded animals are somewhere hot, their bodies react in a different way to cool off. Some warm-blooded animals, like people, sweat to stay cool. Dogs pant to stay cool. Other warm-blooded animals drink lots of water as a way to cool off. Did you know that cows need to drink almost a bathtub full of water a day?

Warm-blooded animals act in different ways to maintain a constant temperature inside their bodies. Mammals can live in habitats with different temperatures because their bodies do not

rely on the environment. Warm-blooded animals, like mammals, must eat often to make energy to heat or cool their bodies. Most warm-blooded animals need to eat every day. Some need to eat every hour!



Dogs pant to stay cool.

Reptiles are cold-blooded animals. The body temperature of cold-blooded animals changes depending on the outside temperature. They become hot when it is hot outside and cold when it is cold outside. But cold-blooded animals must also keep a constant temperature for their bodies to work properly.

Cold-blooded animals do not use energy from their bodies to stay warm or cool. Instead they use what is around them to keep warm or keep cool. Crocodiles stay in water or mud in order to stay cool on hot days. If they need to warm up on cooler days, they bask in the sun.



Cold-blooded animals like these crocodiles cool off by taking a swim when it's too hot. When it's cool outside, they warm up in the sun.

While warm-blooded animals can live in just about any habitat, cold-blooded animals can only live in certain habitats.

Cold-blooded animals do not need to eat as often as warm-blooded animals. This is because they do not need lots of food to make energy to warm or cool their bodies. Most crocodiles only eat once a week, but they can live for months and sometimes years without eating!

Name: _____ **Date:** _____

1. Scientists can group animals as mammals or reptiles based on how they control what?
2. Mammals are warm-blooded animals. Describe how warm-blooded animals keep warm in a cold place.
3. How do cold-blooded crocodiles keep warm on a cool day?
4. What is a main idea of this text?
5. Contrast warm-blooded and cold-blooded animals using evidence from the text.