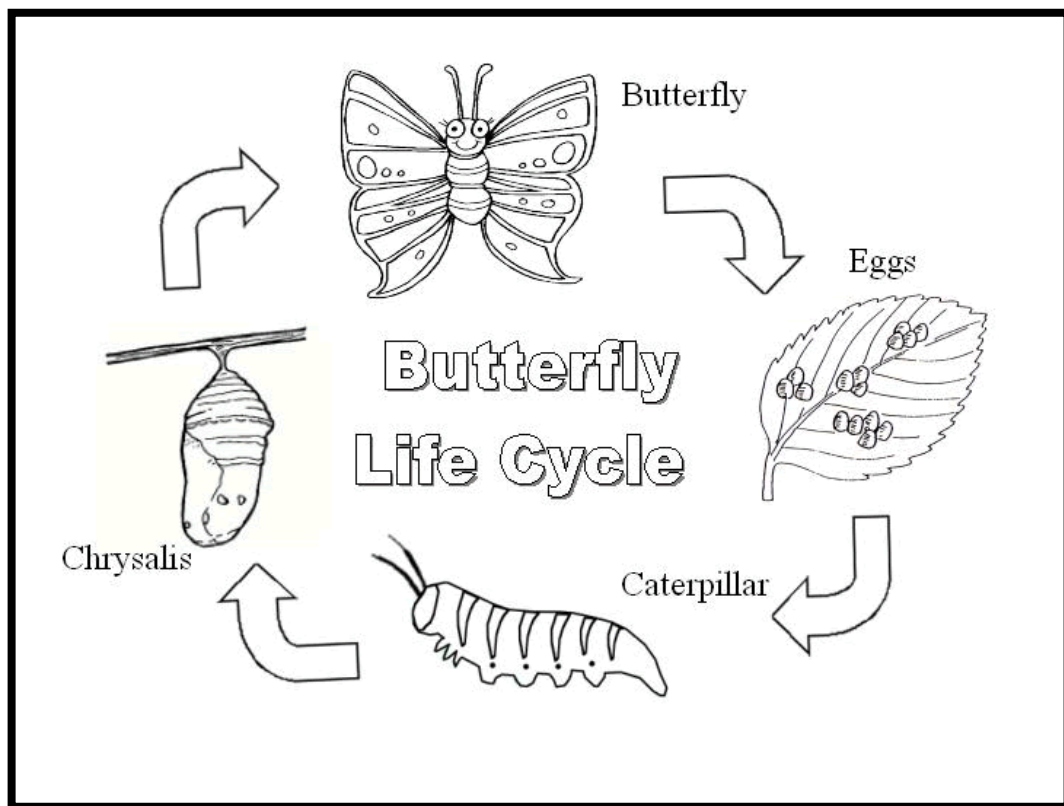


Life Cycles

Learning Journal



Zoologist: _____

Name _____

Date _____

Animal Classification

Choose an animal that you read about today. How can you classify this animal? Use details from the text to support your classification. When you finish, you may add an illustration that supports, or tells about, your writing.

Is It a Vertebrate?

Is it a vertebrate?

Is it a vertebrate?

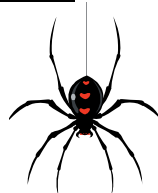
How do you know?

And what else?

What are some examples?

And what else?

arachnid



Yes Ma'am!

Yes Ma'am!

It has a backbone.

A skeleton inside.

Birds, reptiles, fish!

Amphibians and mammals!



crustacean

Is it an invertebrate?

Is it an invertebrate?

How do you know?

And what else?

What are some examples?

And what else?



mollusk

Yes Ma'am!

Yes Ma'am!

It doesn't have a backbone.

Its insides are soft.

Mollusks and crustaceans!

Insects and arachnids!

Animal Traits

Collaborative Talk

Partner A: How would you classify a _____?

Partner B: I would classify a _____ as a _____.

Partner A: What is your evidence?

Partner B: My evidence is that _____.

Partner A: Put your two answers together for me.

Partner B: I would classify a _____ as a _____
because _____.

Traits Chart (Evidence)

<p>Mammal</p> <ul style="list-style-type: none"> -vertebrate -born live -has hair/fur -baby gets milk from its mother -is warm blooded 	<p>Insect</p> <ul style="list-style-type: none"> -invertebrate -lays eggs -has six-jointed legs -may have wings -has three body parts -has antennae -is cold blooded 	<p>Reptile</p> <ul style="list-style-type: none"> -vertebrate -usually lays eggs -has dry, scaly skin -is cold blooded
<p>Amphibian</p> <ul style="list-style-type: none"> -vertebrate -lays eggs -has smooth, moist skin -lives in water and on land -is cold blooded 	<p>Bird</p> <ul style="list-style-type: none"> -vertebrate -lays eggs -has feathers -has wings -usually flies -is warm blooded 	<p>Fish</p> <ul style="list-style-type: none"> -vertebrate -lays eggs -lives in water -has gills for breathing -has fins -is cold blooded

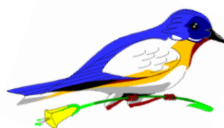
Classification Chant

Is it a fish?
 Is it a fish?
 How do you know?
 And what else?
 What are some examples?



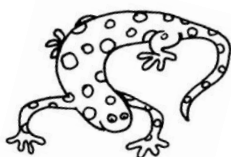
Yes Ma'am!
 Yes Ma'am!
 It has scales and a tail.
 It breathes with gills.
 Trout, salmon, clownfish.

Is it a bird?
 Is it a bird?
 How do you know?
 And what else?
 What are some examples?



Yes Ma'am!
 Yes Ma'am!
 It has feathers and wings!
 It lays eggs.
 Eagles, bluebirds, penguins.

Is it an amphibian?
 Is it an amphibian?
 How do you know?
 And what else?
 What are some examples?



Yes, Ma'am!
 Yes Ma'am!
 It leads a double life.
 It has cool, moist skin.
 Frogs, toads, newts.

Is it a reptile?
 Is it a reptile?
 How do you know?
 And what else?
 What are some examples?



Yes, Ma'am!
 Yes Ma'am!
 It is cold-blooded.
 It has dry, scaly skin.
 Tortoise, lizard, snake.

Is it a mammal?
 Is it a mammal?
 How do you know?
 And what else?
 What are some examples?



Yes, Ma'am!
 Yes Ma'am!
 It has hair.
 Its babies are born live.
 Whales, rabbits, people.

Animal Classification: A World of Animals

Alicia Carter & Jenny Clearwater (Project GLAD 6/08)

ABC Zoo Letter

Dear 2nd Grade Class,



Let me introduce myself. I am Ann Amole, the director of the ABC Zoo. I would like your help. The zoo is planning to add a new animal exhibit and has learned that your class is studying animals. We would like you to take a few weeks to become experts on the ladybug, butterfly, whale, sea turtle and the frog. Please learn about each animal's classification, traits, and life cycle. Then make a recommendation to us about which animal we should add to the zoo. We would love to hear your opinions about the animal you choose.



In addition, we have a special showing of the movie "Rio" planned for next month. As you might know, the main characters in the movie are macaws, birds found in many rain forests. We would love to hand out brochures about the macaw at the movie. Could each student in your class prepare a macaw brochure including an illustration, classification, traits, and a life cycle diagram?



We know this is a big project, but have heard you are up to the challenge!

Thank you for your help!



Sincerely,
Ann Amole



Ann Amole
Director of the ABC Zoo



Name _____

Date _____

Ladybug



Classification: Ladybugs are invertebrates because they do not have a backbone.

They are also classified as an insect. There are about 5,000 kinds of ladybug species in the world.


Physical Traits: Just like other insects, ladybugs have six legs, two sets of wings and antennae. Their bodies are shaped like an oval. Seven-spotted ladybugs are red or orange with three spots on each side and one in the middle. They have a black head with white patches on either side. Ladybugs are colorful for a reason. Their markings tell predators: "Eat something else! I taste terrible." They may also play dead. To help them climb, ladybugs have sticky pads on their legs. These sticky pads also help them crawl upside down without falling off.



Behavioral Traits: When threatened, ladybugs release a bad-tasting fluid from their legs. Ladybugs stay together in groups to keep them safe from predators. When the weather turns cold, they look for a warm place to hibernate. They can hibernate under rocks or logs.



Life Cycle: First, ladybugs lay their eggs in rows on the underside of a leaf. A few days later, larvae emerge. Larvae grow quickly and shed their skin several times. When they are fully grown they attach to a leaf by their tail and form a pupa. In a week, the pupa becomes an adult ladybug. Finally, adult ladybugs can lay their own eggs.

Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

Life Cycle Diagram of the Ladybug

FLEE Map for Description

Name _____

Opening Sentence (animal and classifications)

Trait

Trait

Trait

Closing Sentence

Name _____

Date _____

What did you
learn about
me?



Informational Writing Checklist

Life Cycles Unit, 2nd Grade

- I wrote about the topic and drew a life cycle diagram.

- I organized my ideas and information using
 - a clear topic sentence
 - at least 3 details with a “tell me more” for each detail
 - a concluding sentence

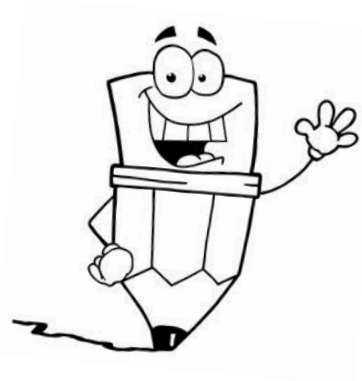
- I used evidence from the text in my writing.

- I used 3 transitions in the life cycle diagram (first, next, after, then, finally).

- I used academic language.

- I used one descriptive word.

- I used correct punctuation, capitalization, and spelling.



Name _____

Date _____



Homework: Extended Response

Use your Ladybug text to answer the following questions.

1. How do scientists classify ladybugs?

Handwriting practice lines for question 1, consisting of four sets of three horizontal lines (top solid, middle dashed, bottom solid).

2. What are some examples from the text that support these classifications? *The author says _____ . This supports the fact that a ladybug is an _____ .*

Handwriting practice lines for question 2, consisting of ten sets of three horizontal lines (top solid, middle dashed, bottom solid).

Animal BUGALOO!

Baby mammals born alive,
 Drink mother's milk to survive.
 Begin life furry, helpless, and small,
 Grow to resemble parents, one and all.

***Mammals, fish, insects, too,
 Doing the animal BUGALOO!***



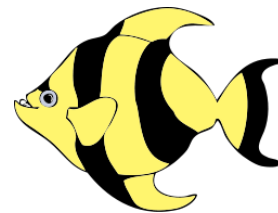
Hatching from hard-shelled eggs they peep,
 Baby birds need lots of sleep.
 Soft down covers their tiny bodies,
 Grow to be feathered birds like their mommies.

***Birds, reptiles, amphibians, too,
 Doing the animal BUGALOO!***



Fish have gills and many scales too,
 Lay hundreds of eggs in the ocean blue.
 But many hungry predators lie in wait,
 Some survive but others meet their fate.

***Fish, reptiles, amphibians, too!
 Doing the animal BUGALOO!***



Rubbery eggs are laid under leaves,
Tiny larva hatch hungrily.
Look like spiky worms, oh my,
Not at all like a butterfly!



But soon larvae molt many times and grow,
They become a pupa and hang down low.
They're changing in their chrysalis,
A butterfly emerges....that's metamorphosis!



***Insects, mammals, birds, too,
Doing the animal BUGALOO!***

Fish-like tadpoles breathe with gills,
Live in water just until,
Legs and lungs begin to grow,
Now they're frogs, amphibians you know.




***Amphibians, mammals, birds, too,
Doing the animal BUGALOO!***

Butterfly Predictions

- Based on what we have learned about animals, how do you think we should classify the butterfly?
- What evidence do you see to support the butterfly's classification?
- What can we predict about the life cycle?



Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

Life Cycle Diagram of the Butterfly

Extended Response



A large rectangular box with a black border, intended for writing an extended response. It is connected to the images above by a horizontal line.

At the end of the story, how did the author show the life cycle of the girl? Use words and pictures on pg. 169-171 to explain your answer.

A series of ten horizontal lines for writing, each consisting of a solid top line, a dashed middle line, and a solid bottom line.

Name _____

Date _____

Gray Whale



Classification: Gray whales are vertebrates because they have a backbone.

They are also classified as a mammal.

Physical Traits: The gray whale has a large body with a narrow head. They also have paddle-shaped flippers that help them balance and turn in the ocean. Adult gray whales can be 48 feet long and weigh 80,000 pounds.

This is about the same weight as 4 buses! Just like other mammals, gray whales need to breathe air so they have two blowholes. Gray whales do not have teeth. They have baleen which are long, flat plates that help filter the water. Gray whales eat plankton, small microscopic animals that float in the ocean.



Behavioral Traits: In winter, gray whales leave the cold waters of Alaska and migrate to the warm waters of Baja Mexico. This is one of the longest migrations of mammals – 10,000 miles.




Gray whales breach. They jump halfway out of the water and fall back with a large splash. They may do this

to clean off barnacles or communicate with other whales. Gray whales are curious creatures! Spyhopping lets them see the world around them. To do this, they poke their head out of the water and turn around slowly.

Life Cycle: First, gray whales give live birth to one baby, a calf, in the warm waters of Mexico. The whales stay in the warm waters so the baby can build up a thick, blubbery coat. Calves depend on their mother for milk. After 7 months, the baby calf is able to find its own food, but stays with its mother for one year. The baby whale will continue to grow until 8 years old.

Finally, the gray whale is ready to have a baby of its own.

Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

Life Cycle Diagram of the Gray Whale

Name _____

Date _____

Homework: Extended Response

Use your Gray Whale text to answer the following questions.



1. How do scientists classify gray whales?

2. What are some examples from the text that support these classifications?

Opening Sentence (animal and classifications)

Trait

Trait

Trait

Closing Sentence

Name _____

Date _____

What did you learn about me?



Informational Writing Checklist

Life Cycles Unit, 2nd Grade

- I wrote about the topic and drew a life cycle diagram.

- I organized my ideas and information using
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 - a concluding sentence

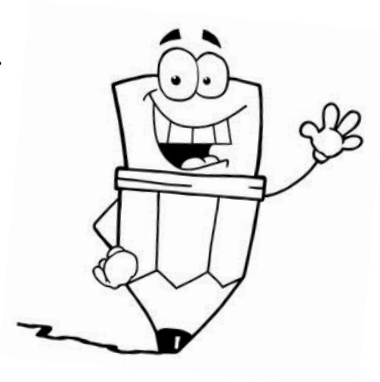
- I used evidence from the text in my writing.

- I used 3 transitions in the life cycle diagram (first, next, after, then, finally).

- I used academic language.

- I used one descriptive word.

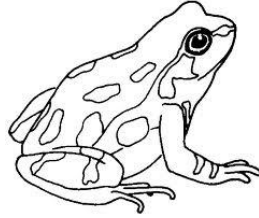
- I used correct punctuation, capitalization, and spelling.



Name _____

Date _____

Frog



Classification: Frogs are vertebrates because they have a backbone. They are also classified as amphibians. Amphibian means two lives, a frog will spend part of their life under water and the remainder on land.



Physical Traits: Frogs have special skin! They drink and breathe through it. The frog gets its moisture through its skin. This is why they are wet and slimy. They have long, powerful jumping legs and a very short backbone. Most frogs have teeth. They have a sticky, muscular tongue that allows them to catch and swallow insects.

catch and swallow insects.



Behavioral Traits: Even though frogs live on land, they must live near water. They will die if their skin dries out. Frogs can see in front of them, sideways, and upwards all at the same time. They don't keep their eyes closed – not even when they sleep.

Life cycle: First, frogs lay their eggs near water. Next, the eggs hatch into tadpoles. Tadpoles breathe with gills and swim using a tail.



Around 6 weeks, legs and arms pop out. As they get older, they will have a teeny tail stub. Finally, the tail stub disappears and they are an adult frog and are ready to lay eggs.

Name _____

Date _____

Sea Turtle



Classification: Sea turtles are vertebrates because they have a backbone. Sea turtles are also reptiles. They have scaly skin and they breathe air.

Physical Traits: Sea turtles have four flippers that help them swim in the ocean. They have a shell that protects them. Sea turtles do not have teeth. Their jaw is like a beak to help them eat their food. Sea turtles can be brown, green, or black.



Behavioral Traits: Sea turtles spend their lives in the warm waters searching for sea plants and sea animals to eat. They are strong swimmers and good divers. Sea turtles can stay under water for as long as five hours when they are resting.

Life cycle: First, a sea turtle lays eggs in a nest. After 1 to 2 months, the baby turtles begin to break out of their eggs. They stay in the nest until they make their journey to the sea.



Soon, the babies climb out of their nest and head to the water. They live in the ocean until they are full grown. Finally, they are ready to lay eggs of their own.

Lexile: 630

Question / Answer Frames

Your animal expert is ready to teach you all about their animal. Use the frames below to help guide your conversation. Take turns asking the questions.



Group Member: What is your animal and how is it classified? How do you know?


Expert: My animal is a _____.
It is classified as a _____ and a (an) _____.
I know it is a _____ because it is/has _____.

Group Member: What are three traits of the _____?

Expert: The _____ has _____.
It _____.
It also _____.


Group Member: What are the life cycle stages of _____?

Expert: First, _____.
As it grows older, _____.
When _____.
Finally, _____.

Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

Life Cycle Diagram of the Frog

Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

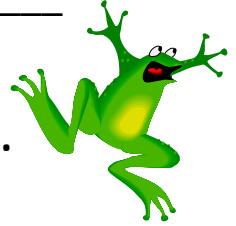
Life Cycle Diagram of the Sea Turtle

Name _____

Date _____

Homework: Extended Response

Use your Frog text to answer the following questions.



1. How does the author describe the frog's skin?

2. What are some examples from the text that support this description?

Name _____

Date _____



Homework: Extended Response

Use your Sea Turtle text to answer the following question.

1. The author states that sea turtles are **strong swimmers**. What **details** did the author use to support, or show, this?

Handwriting practice lines consisting of solid top and bottom lines with a dashed middle line. There are 15 sets of these lines provided for the student to write their response.

Name _____

Date _____

Macaw



Classification: Macaws are vertebrates. They have a backbone. They are classified as a bird. There are about 17 macaw species in the world. Macaws mostly live in the rainforests of Mexico, Central America, and South America.

Physical Traits: Macaws are large birds. They can be up to 35 inches long. They have blue, red, green, yellow, and orange feathers. Some macaws have wings that are 2 feet long. Macaws have a curved bill that is sharp and powerful.



Behavioral Traits: Macaws nest in holes that are high in the trees. They are intelligent and social birds. Macaws are very noisy birds. They make loud squeaks and screams. Macaws can fly




up to 30 miles per hour. They fly in pairs or in small flocks. They can live for up to 80 years.

Make a Life Cycle Diagram using the following paragraph.

Life Cycle: First, macaws lay two plain white eggs. Both parents incubate, or sit on the eggs. The chick hatches after 26 days. Macaws stay with their parents for two to ten years. Finally, the macaw will have babies of its own.



Animal illustration	Classifications vertebrate/invertebrate mammal, reptile, amphibian, fish, bird, insect	Traits physical and behavioral	Interesting Facts
			

Draw Life Cycle Diagram on the back of this page.

Opening Sentence (animal and classifications)

Trait

Trait

Trait

Closing Sentence

Name _____ Date _____

What did you learn about me?



Life Cycle Diagram of the Macaw

Informational Writing Checklist**Life Cycles Unit, 2nd Grade**

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- I organized my ideas and information using
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 - at least 3 details with a “tell me more” for each detail
 - a concluding sentence

- I used evidence from the text in my writing.

- I used 3 transitions in the life cycle diagram (first, next, after, then, finally).

- I used academic language.

- I used one descriptive word.

- I used correct punctuation, capitalization, and spelling.

