

KEYSTONE SPECIES

KEYSTONE SPECIES LESSON PLAN

Week at a Glance:
Day One: What Is A Keystone Species?
Day Two: Beavers
Day Three: Wolves
Day Four: Sharks
Day Five: Bees



KEYSTONE SPECIES BEAVER UNSCRAMBLE

Directions: Unscramble each word associated with beavers.

W D O O _____
B D L U I _____
F S H I _____
H B E R V R O E I _____
S M W I _____
R V I E R _____
W T E N D I A _____



KEYSTONE SPECIES LESSON PLAN

Day One: Intro to Keystone Species
Objective: The students will be able to define "keystone species" and identify various types of keystone species.

LESSON PLAN: DAY ONE

Introduction (5 minutes):
*Teacher Says: What does it mean to be a keystone species? A keystone species is a species that has a very large impact on its ecosystem. They play an important role in keeping their ecosystem balanced and if they were removed or to go extinct, it would dramatically impact their environment and the other species in it. They help control the population of other species, maintain food webs, and shape habitats. A few examples are sea otters, beavers, wolves, sharks, bees, elephants, brown bears, starfish, jaguars, and more!



KEYSTONE SPECIES BEAVER RESEARCH

Directions: Use your response to find more information about beavers. Fill in the information below.


BEAVERS
By _____
Appearance _____
diet _____
HABITAT _____

Interesting Facts _____




KEYSTONE SPECIES ALL ABOUT SHARKS

Directions: In the circles below, write down four facts about sharks.



KEYSTONE SPECIES VOCABULARY SQUARE

| | |
|---------------------------|---|
| Word: keystone species | Definition:  |
| See _____ | |

A FIVE DAY UNIT ALL ABOUT KEYSTONE SPECIES!

Includes lesson plans, graphic organizers, craft ideas, projects, comprehension questions and more!

FROM YOUR FRIENDS AT

az
ANIMALS

KEYSTONE SPECIES

LESSON PLAN

Week at a Glance:

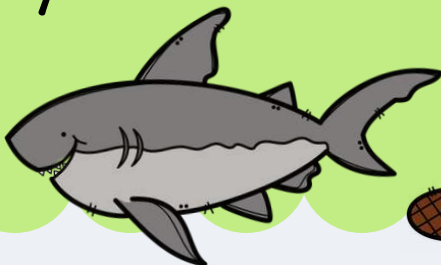
Day One: What Is A
Keystone Species?

Day Two: Beavers

Day Three: Wolves

Day Four: Sharks

Day Five: Bees



KEYSTONE SPECIES



LESSON PLAN



Day One: Intro to Keystone Species

Objective: The students will be able to define "keystone species" and identify various types of keystone species.



LESSON PLAN: DAY ONE

Introduction (5 minutes):

*Teacher Says: What does it mean to be a keystone species? A keystone species is a species that has a very large impact on its ecosystem. They play an important role in keeping their ecosystem balanced and if they were removed or to go extinct, it would dramatically impact their environment and the other species in it. They help control the population of other species, maintain food webs, and shape habitats. A few examples are sea otters, beavers, wolves, sharks, bees, elephants, brown bears, starfish, jaguars, and more!

KEYSTONE SPECIES

Lesson (20 minutes):

*The teacher will read the book, "Keystone Species: Meet the Animals Key to Ecosystem Health and Biodiversity with Hands-On Science Activities for Kids". Questions to ask during/after reading - What is a keystone species? Why are keystone species important? What happens if a keystone species disappears? How does one animal affect other animals?

*The teacher will guide the students in completing the "Vocabulary Square". They will define the word "keystone species", write a sentence using the word and draw a picture.

Independent Work (10 minutes)

*The students will complete the "Keystone Species Quick Check" comprehension questions attached below. The teacher will assess answers for understanding of the lesson.

Closing (5 minutes)

*Whole Group Discussion: What makes an animal a keystone species? What do you think would happen if these species went extinct?

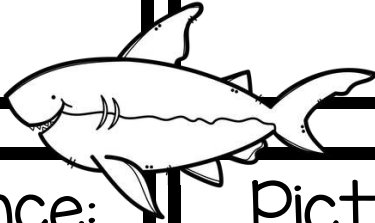
KEYSTONE SPECIES

VOCABULARY SQUARE

Word:

keystone
species

Definition:



Sentence:

Picture:

KEYSTONE SPECIES

KEYSTONE QUICK CHECK

1. What is a keystone species?

2. What are examples of keystone species?

3. Why are keystone species important for our environment?

KEYSTONE SPECIES



LESSON PLAN



Day Two: Beavers

Objective: The students will be able to identify various characteristics of beavers.

LESSON PLAN: DAY TWO

Introduction (5 minutes):

*Teacher Says: The first animal species that we are going to learn about are beavers. What do you already know about beavers? Beavers are an example of a keystone species. They change the environment in ways that help many other plants and animals survive. They are especially known for building beaver dams, which slows down the water and creates ponds and wetlands. When beavers build dams they create habitats for many fish, birds, frogs and amphibians. Without beavers, what do you think would happen? Without them, certain wetlands would dry up, many animals would lose their home, and variety of life decreases.

KEYSTONE SPECIES

Lesson (15 minutes):

*The students will watch the video "American Beaver" from National Geographic Kids - <https://www.youtube.com/watch?v=Ic3x80VYe80&t=355s> Questions to ask after video - What did you learn about beavers? Where do they live? What do they eat? Why are they important?

*The students will complete the "Beaver Unscramble" in small groups.

Independent Work (10 minutes)

*The students will research more about great white sharks. They will utilize the "Beaver Research" activity sheet to record information. Students can extend the activity by creating a poster or writing a nonfiction writing piece.

Closing (5 minutes)

*The students will share their "Beaver Research" activity sheets with the whole group.

KEYSTONE SPECIES

BEAVER UNSCRAMBLE

Directions: Unscramble each word associated with beavers.

W D O O



B D L U I



F S H I

H B E R V R O E I

S M W I



R V I E R



W T E N D L A

KEYSTONE SPECIES

BEAVER RESEARCH

Directions: Use your resources to find more information about beavers. Fill in the information below.

BEAVERS

By:

Appearance

diet

HABITAT

Interesting Facts



KEYSTONE SPECIES

LESSON PLAN

Day Three: Wolves

Objective: The students will be able to describe characteristics of wolves.



LESSON PLAN: DAY THREE

Introduction (5 minutes):

*Teacher Says: Today, we are going to investigate more about another keystone species - wolves! Before we begin, record on your "KWL" chart what you already know about wolves. Why do you think wolves are considered keystone species? Wolves are the top predators in their environment and help control prey populations, which shapes their entire ecosystem. When wolves are present, the deer/elk population stays controlled, plants and trees recover, birds and small animals return, beavers increase and rivers stabilize. It's a chain reaction - which means because one thing happens, another thing happens! Why do you think wolves have this large of an affect on their habitat? What would happen without wolves?

KEYSTONE SPECIES

Lesson (15 minutes):

- *The students will record what they would like to learn about wolves in the "Want to Know" category on the "Wolf K-W-L" graphic organizer attached.

- *The teacher will play the video, "Gray Wolf" from National Geographic Kids - <https://www.youtube.com/watch?v=VYKsI5ILidQ>

Independent Work (10 minutes)

- *The students will complete the "Fact or Fiction?" activity worksheet attached below. They will color in the true statements in green and the false statements in red.

Closing (5 minutes)

- *The students will use their "K-W-L" graphic organizer to record the information that they learned from the lesson.

KEYSTONE SPECIES

WOLF K-W-L

KNOW

WANT TO
KNOW



LEARNED

KEYSTONE SPECIES

FACT OR FICTION?

Directions: Color the facts in green. Color statements that are fiction in red.

Wolves
live
alone.

Wolves
have
sharp
senses.

Wolves
live in
packs.

Wolves
live in forests,
mountains,
grasslands &
tundras.

A wolf
is in the canine
family, the same
family as dogs.

There
is only
one wolf
species.

Wolves
are an example
of a
keystone
species.

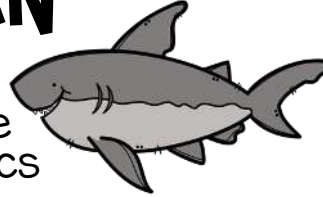
Wolves
can be
pets.

KEYSTONE SPECIES

LESSON PLAN

Day Four: Sharks

Objective: The students will be able to describe characteristics of sharks.



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LESSON PLAN: DAY FOUR

Introduction (5 minutes):

*Teacher Says: Today, we are going to be exploring more about sharks! Sharks are another top predator keystone species, specifically in the ocean ecosystem. They help keep marine habitats balanced. Why do you think sharks are important for the ocean? When sharks are present, prey populations stay balanced, seagrass and coral ecosystems stay healthy, and variety of animals/plants increases. What do you think would happen if we didn't have sharks in the ocean?

KEYSTONE SPECIES

Lesson (15 minutes):

*The teacher will show the video, "Sharks! Weird but True" from National Geographic Kids - <https://www.youtube.com/watch?v=moIrGJh56Sg>

*The teacher will lead the students in completing the "All About Sharks" graphic organizer attached below. The students will write four facts about sharks in the circles on the worksheet.

Independent Work (10 minutes)

*The students will research more about lions. They will utilize the "Shark Research" activity sheet to record information. Students can extend the activity by creating a poster or writing a nonfiction writing piece.

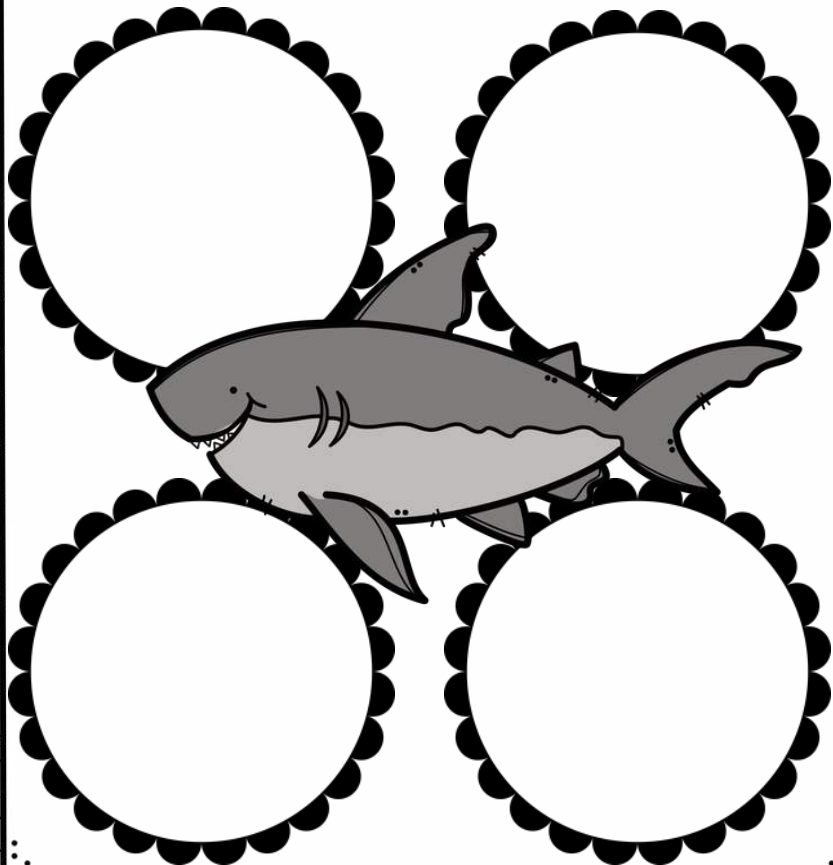
Closing (5 minutes)

*The students will share their "Shark Research" activity sheets with the class or in small groups.

KEYSTONE SPECIES

ALL ABOUT SHARKS

Directions: In the circles below, write down four facts about sharks.



KEYSTONE SPECIES

SHARK RESEARCH

Directions: Use your resources to find more information about sharks. Fill in the information below.

SHARKS

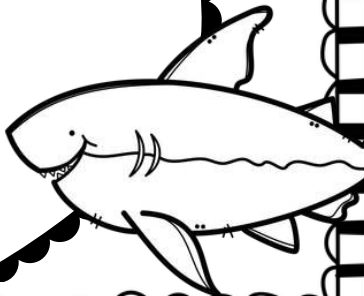
By:

Appearance

diet

HABITAT

Interesting Facts

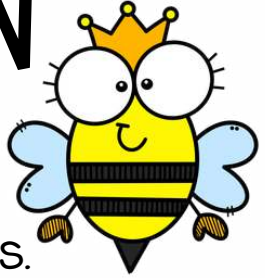


KEYSTONE SPECIES

LESSON PLAN

Day Five: Bees

Objective: The students will be able to describe characteristics about bees.



LESSON PLAN: DAY FIVE

Introduction (5 minutes):

*Teacher Says: Today we are exploring more about another type of keystone species - bees. Bees are a keystone species because they play an extremely important role in pollination, which supports our entire ecosystems. Bees move pollen from one flower to another, called pollination, which allows plants to grow, reproduce and make fruit. When bees are present, not only can plants can reproduce, but fruits and vegetables grow, animals have food to eat, and ecosystems stay healthy and diverse.

KEYSTONE SPECIES

Lesson (15 minutes):

*The teacher will read the book, "Explore My World: Honey Bees". Questions to ask during/after reading - Where do bees live? Why are bees important? How do they help plants grow? What might happen if there were no bees?

*The teacher will guide the students in completing the "Bees can, have, are" graphic organizer attached below.

Independent Work (10 minutes)

*The students will write a 3-5 sentence paragraph describing bees and why they are important for our environment using the attached writing template below. They will also draw a picture to match their writing!

Closing (5 minutes)

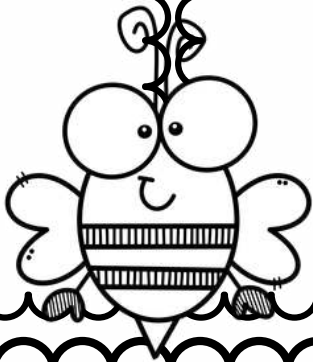
*The students will share their bee writing paragraph with a small group or to the whole group.

KEYSTONE SPECIES

b e e s

can

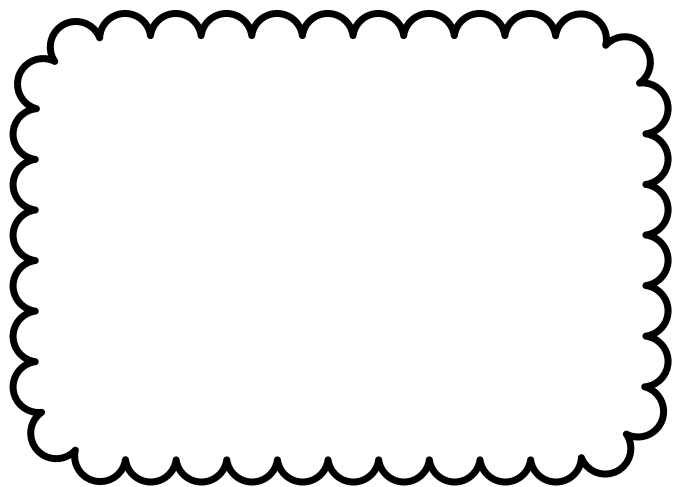
are



have

KEYSTONE SPECIES

Buzzing Bees



Five horizontal dashed lines for writing.