(41) Animal Classification

Health Message: Importance of a balanced diet

Podcast length: 15:50

THE
**walking
classroom**

walk. listen. learn.

LESSON PLAN

SYNOPSIS

Today's Walking Classroom podcast looks at the six different animal classifications: reptiles, amphibians, mammals, fish, birds, and insects. Each category is signified by specific characteristics that an animal must possess in order to be classified. Classification is used to organize many different things in order to make categories easier to understand.

COMMON CORE STANDARDS

SL.4.1 Engage effectively in a range of collaborative discussions with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes.

RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize a text.

OBJECTIVES

Students will:
- o   Identify six groups of animals
- o   Compare and contrast the characteristics of the different classifications
- o   Evaluate how classifying things makes it easier to understand them

PROCEDURE

If you want to compare student comprehension before and after listening, administer the Comprehension Quiz before doing anything related to the podcast. Retest after walking.

1. Review key vocabulary (included definitions are limited to the context of today's podcast)

- **vertebrate** (noun): an animal with a skeletal system
    *A salamander is a **vertebrate** because it has bones.*

- **antennae** (plural noun): appendages that insects use to hear, touch, taste and smell
    *The grasshopper wiggled its **antennae** as it hopped from leaf to leaf.*

- **exoskeleton** (noun): a hard outer covering
    *Instead of bones, insects have an **exoskeleton**.*

2. Build background by asking students, "Have you ever wondered what the difference is between a fish and a whale? Or why a frog isn't a reptile?" *(allow time for discussion)*

3. Podcast preview: "Did you know that all the animals on Earth are divided into six distinct groups? Today we're going to learn more about animal classification and the characteristics that set animals apart from one another. Ready? Let's go!"

4. Walk!

5. Upon return to the classroom, discuss the main ideas and highlights of the podcast. Main ideas and highlights might include the following:

   o Animals are classified into several categories, including: mammals, reptiles, amphibians, birds, insects, and fish. Each category is signified by specific characteristics that an animal must possess in order to be classified.
   o We use classification to organize many different things in addition to the animal kingdom.
   o Without classification it would be difficult to distinguish like items. We classify things by their characteristics to make it easier to understand them.

6. Administer comprehension quiz.

QUESTIONS FOR THOUGHT AND DISCUSSION

1. Enthusiastically ask students how they feel post-walk. Foster a healthy attitude toward exercise by reminding students that physical activity improves brain function.

2. What did you learn about animal classification? What are the characteristics of each of the six groups? How are the groups similar? How do they differ?

3. Why is it helpful to classify things? Where do we see classification beyond the animal kingdom?

4. Being able to classify the entire animal kingdom took many minds and required cooperation. What is the benefit of cooperating on large projects? Many people prefer cooperation to working alone. What are the advantages of both approaches? If you are someone who would rather work independently, why is it still important to be able to cooperate with others?

COMPREHENSION QUIZ ANSWER KEY
1. a   6. c
2. b   7. b
3. b   8. a
4. c   9. a
5. b   10. a

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www.thewalkingclassroom.org

Name _____   Date _____

1. Animal classification...

   a. is used to identify animals as members of six distinct groups.
   b. identifies which animals are the smartest.
   c. is a tool for helping scientists discover new animals.

2. What's the difference between a reptile and an amphibian?

   a. Reptiles lay eggs and amphibians give birth to live young.
   b. Reptiles have dry skin and amphibians have moist skin.
   c. Reptiles have skeletons and amphibians do not.

3. Which of the following is a characteristic of most mammals?

   a. They can all live both on land and in the water.
   b. They have fur and ears that stick out from their heads.
   c. The walk around on two legs.

4. A vertebrate is...

   a. an animal that lays eggs
   b. an animal that is primarily green in color
   c. an animal with a skeleton

5. What word would best describe mammals?

   a. cold-blooded
   b. warm-blooded
   c. scaly

6. Which of the following is a fact about animal classification?

   a. All scientists need to know specific details about animal classification.
   b. Without animal classification we wouldn't be able to tell a dog from a cat.
   c. Insects have exoskeletons, antennae and, typically, six legs.

7. What types of animals have feathers, lay eggs and are warm-blooded?

   a. reptiles   b. birds   c. fish

8. Why aren't whales and dolphins classified as fish?

   a. They have to come to the surface to breathe air.
   b. They have gills but they do not have fins.
   c. They are too large to be considered fish.

9. It's important to eat a healthy diet that balances foods from the major food groups.

   a. true   b. false

10. Eating too much of one thing, like meat or breads, can leave us feeling lousy and low-energy.

   a. true   b. false

(42) Food Chains
Health Message: Vitamins

Podcast length: 13:17

LESSON PLAN

SYNOPSIS

Today's Walking Classroom podcast talks about the food chain, which is made up of producers and consumers. Each level depends on the next for energy to maintain a natural balance. When one level of the food chain is destroyed, things fall apart. Entire species of animals can die out from hunger because their food source has disappeared or become overpopulated because there is no longer a predator to hunt them.

COMMON CORE STANDARDS

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SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes.

RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize a text.

OBJECTIVES

Students will:
- o   Identify and name the different members of the food chain
- o   Understand the difference between herbivores, omnivores and carnivores
- o   Explain the importance of balance within natural systems

PROCEDURE

If you want to compare student comprehension before and after listening, administer the Comprehension Quiz before doing anything related to the podcast. Retest after walking.

1. Review key vocabulary (included definitions are limited to the context of today's podcast)

   - **producer** (noun): a member of the food chain which produces its own food
   *Plants are **producers** because they make their own food using sunlight.*

   - **consumer** (noun): a member of the food chain which eats other things to survive
   *A bear is a **consumer**; salmon are a regular part of their diet.*

   - **herbivore** (noun): an animal that only eats plants
   ***Herbivores** are usually the primary consumers in a food chain.*

   - **omnivore** (noun): an animal that eats both plants and animals
   *Bears are **omnivores** because they eat both berries and smaller animals.*

- **carnivore** (noun): an animal that only eats meat
  *Lions are **carnivores** who hunt their food.*

2. Build background by asking students, "What is the food chain? What do you know about it?"
(allow time for discussion)

3. Podcast preview: "Did you know that all the animals on Earth are connected through a web of food chains? Today we're going to learn more about the food chain and how it works to exchange energy between living things. Ready? Let's go!"

4. Walk!

5. Upon return to the classroom, discuss the main ideas and highlights of the podcast. Main ideas and highlights might include the following:
   o The food chain is made up of producers and consumers. Each level depends on the next for energy and to maintain a natural balance.
   o When one level of the food chain is destroyed, things fall apart. Entire species of animals can die out from hunger because their food source has disappeared or become overpopulated because there is no longer a predator to hunt them.
   o Synonyms are words that have the same meanings. Antonyms are words that have opposite meanings.

6. Administer comprehension quiz.

QUESTIONS FOR THOUGHT AND DISCUSSION

1. Enthusiastically ask students how they feel post-walk. Foster a healthy attitude toward exercise by reminding students that physical activity improves brain function.

2. What did you learn about the food chain? What is the difference between a consumer and a producer? Are you a carnivore, omnivore or herbivore? Why?

3. Why is the food chain so delicate? What happens if one level of the chain is destroyed? How can humans work to ensure that this does not happen?

4. The delicate balance of the food chain is an excellent example of why it is so important for us to respect nature. What are some ways you can show your respect for nature? Even though humans have the power to shape and change nature, why should they avoid doing so? What lasting effects could tampering with nature have on our lives?

COMPREHENSION QUIZ ANSWER KEY
1. a	6. a
2. b	7. 1,3,2
3. c	8. a
4. b	9. a
5. c	10. b

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Name _____   Date _____

1. The food chain is best understood as...

    a. an exchange of energy from one living thing to another.
    b. a giant web connecting everything on Earth.
    c. a race to be the eater rather than the eaten.

2. What is a primary consumer?

    a. A plant or organism that produces its own food
    b. The first thing to eat something in a food chain
    c. The highest member on the food chain

3. Most animals in the food chain are...

    a. predators.
    b. prey.
    c. both predator and prey.

4. An omnivore is...

    a. an animal that only eats meat.
    b. an animal that eats meat and plants.
    c. an animal that only eats plants.

5. According to the podcast, what word would best describe the food chain?

    a. temporary   b. indestructible   c. delicate

6. Which of the following is a fact about food chains?

    a. Each food chain is a part of a much larger web of animals and organisms.
    b. Plants make up their own food chain.
    c. Lions and tigers are at the very top of the food chain.

7. Number the events in the order in which they would happen in a food chain (1,2,3)

    _____ Sunlight shines on the grass allowing it to grow and create food.
    _____ A family sits down to a dinner of hamburgers and salad.
    _____ Cows eat the grass.

8. Why is it important that no level of the food chain gets completely eliminated?

    a. It would upset the balance; some species would die out because they had no food while others would get too large because nothing was preying on them.
    b. There would not be enough prey for the predators to hunt.
    c. The food chain would not be able to adapt and create a new link.

9. Spinach and asparagus are good sources of Vitamin B.

    a. true   b. false

10. There are no vitamins in meat.

    a. true   b. false