

Fifth Grade Reading

Week Seven-Nonfiction

Daily Work Focus: Main Idea & Details

Science Connection: Living Systems (Animals & Plants)

- Students should read a **nonfiction** book or article a minimum of 20 minutes per day (Websites: Epic, Tumble Books, or teacher assigned Newsela or Readworks articles) in addition to the activities listed below.
- To paragraph shrink in nonfiction, next to each paragraph, write the topic and what you're learning about. Keep it short! 2-3 words. Example - "panda diet"

Steps to Finding the Main Idea:

- Tell the topic of the text using few words, by looking at/reading the title, headings, and other text features
- Turn each title/heading into a question
- Find supporting/key details by listening for repeated and/or key words & using text features
- Tell the main idea (what section/text was mostly about) using repeated/key words & text features to answer your question
- Tell 2 details that support the main idea.

Day 1	<ul style="list-style-type: none"> Chunk and paragraph shrink the nonfiction passage <i>Vertebrates and Invertebrates</i>. Complete Steps 1-4 only of "<u>Steps to Finding the Main Idea</u>" for the last two sections of the passage. Use the chart below the passage or draw one on paper. (The first section has been completed as an example!)
Day 2	<ul style="list-style-type: none"> Reread the nonfiction passage <i>Vertebrates and Invertebrates</i> and answer the questions. Complete step 5 of "<u>Steps to Finding the Main Idea</u>" from above for the last two sections of the passage. Continue the chart you started yesterday. Using the main ideas that you found yesterday, write a summary of the entire passage in your words. Record the meaning of the underlined words (pay attention to the prefixes and/or suffixes!)
Day 3	<ul style="list-style-type: none"> Chunk and paragraph shrink the nonfiction passage <i>Plant Anatomy</i>. Complete Steps 1-4 only of "<u>Steps to Finding the Main Idea</u>" for each section of the passage. Use the chart below the passage or draw one on paper.
Day 4	<ul style="list-style-type: none"> Reread the nonfiction passage <i>Plant Anatomy</i> and answer the questions. Complete step 5 of "<u>Steps to Finding the Main Idea</u>" from above for the last two sections of the passage. Continue the chart you started yesterday. Using the main ideas that you found yesterday, write a summary of the entire passage in your words. Write 1 synonym and 1 antonym for each of the underlined words.
Day 5	<ul style="list-style-type: none"> Complete Vocabulary Word Work found below the passage <i>Plant Anatomy</i>. Read a nonfiction book or article of your choice. Write down at least 3 new interesting facts you learned from what you read and share them with a family member. Creating Text Features: Look back at the two articles you read this week. Create a text feature for each article that is not in the article. Write how the text feature you created matches the text.

Vertebrates and Invertebrates

Scientists who study the animal kingdom **classify** animals into different groups, based on different characteristics. Some characteristics scientists study are:

- what makes up the animal's skin, such as hair or scales
- whether animals give birth to live babies or lay eggs
- whether mothers feed their babies milk from their own bodies
- whether animals are warm-blooded or coldblooded

Scientists classify living things by different characteristics, such as what is on their skin, if they lay eggs or have live babies, how they feed their babies, and whether they are warm-blooded or cold-blooded.



The Importance of a Backbone

Another key characteristic that scientists study is whether animals have a backbone. Animals that have a backbone are called vertebrates. Humans are vertebrates. Place your hand on the back of your neck until you feel a bump. Now, rub your hand up and down the middle of your back. Do you feel bumpy bones that run in a row down your back, from your neck down to your waist? That's your backbone. Another name for a backbone is a spine.

The backbone or spine wraps around and protects an important part of your body called the spinal cord. The spinal cord is a bundle of nerves. Messages travel up and down your spinal cord from your brain to other parts of your body. This is the way that your brain sends signals telling the other parts of your body what to do.



Humans have a backbone and are classified as vertebrates.

Many other animals also are vertebrates. All mammals, reptiles, fish, and birds have a backbone, so they are all vertebrates. They have some type of spinal cord, too.

Animals with a backbone come in all different shapes and sizes. Apes, rhinos, horses, rabbits, bats-and yes, rats and humans, too-are all mammals and vertebrates. Lizards, turtles, snakes, and crocodiles are reptiles and vertebrates. Huge sharks and tiny goldfish are also vertebrates. Small hummingbirds and large eagles are vertebrates, too.



These animals are all classified as vertebrates because they have a backbone.

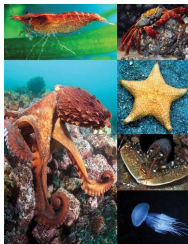
Types of Invertebrates

But there are many more animals that do not have a backbone. Animals without a backbone are called **invertebrates**. Insects are the **largest** group in the animal kingdom. Insects are also the largest group of invertebrates. Insects include flies, wasps, beetles, cockroaches, ladybugs, and butterflies. Other kinds of invertebrates include earthworms and spiders.

These animals are invertebrates that do not have a backbone.



Some interesting invertebrates live in the sea. Lobsters, shrimp, and crabs do not have a backbone. The giant octopus is an invertebrate as well. Have you ever seen a jellyfish or a starfish? They are also invertebrates. So, these animals do not have a backbone or spinal cord.



These invertebrates live in the saltwater environment of the sea.

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1. Topic of passage _____

2. Title or Heading (Flip your title or heading into a question)	3. Key Details (Read to find repeated words, key words, text features)	4. Main Idea (Answer your question in a complete sentence)	5. Supporting Details (Give 2 details from the text that support the main idea)
<i>*Examples provided for the first section, Vertebrates and Invertebrate.</i> <i>Example: What are vertebrates and invertebrates?</i>	<i>Example: animals, groups, differences</i>	<i>Example: Scientists create groups of animals based on many differences they have.</i>	<i>Example:</i> 1. Animals can be grouped based on whether they are cold blooded or warm blooded. 2. Animals can be grouped by whether they lay eggs or have live babies.
			1. 2.

What is the difference between a vertebrate and an invertebrate?

Name two ways scientists classify animals ? _____

Name 5 examples of vertebrates and 5 examples of invertebrates: _____

Plant Anatomy

By Gale, Cengage Learning, adapted by Newsela staff

Image 1. A visitor inspects a log from a fallen Redwood tree in California.

Plants vary tremendously in size and shape. They range from floating water plants the size of a pencil dot to trees towering hundreds of feet high. Plants grow all over the Earth, even in extremely cold and hot climates. There are an estimated 500,000 types of plants. Despite their wide range of appearances, plants share similar anatomy, or structure.



Most plants are vascular plants. This means they have a vascular system, or a network of tube-like structures that move nutrients and water to all parts of the plant.

At The Root Of It

All vascular plants have roots. In general, the roots are located underground. They **anchor** the plant, keeping it from being tossed around in the wind. Most plants absorb water and nutrients through their roots.

Plants' roots are covered in microscopic hairs. The root hairs absorb water through a process called osmosis. During osmosis, water moves from an area where it is **abundant** to an area where it is less abundant. In this case, water moves through the plant cell membrane. The membrane is semi-permeable, meaning that some substances can pass through it. The membrane acts as a gateway for the cell. It has control over what enters and exits the cell. The water passes from the soil through the cell membranes of the root cells.

In addition to water, roots also take in oxygen. Although plants produce oxygen, they also need some to live. Plants depend on soil, which contains pockets of oxygen. Many times, plant roots lie near the ground where there is a richer supply of it. However, trees that live in mud, where there is little oxygen, have roots that lie above ground to gather oxygen.

Some plants, called epiphytes, have their roots in the air. Epiphytes usually live on another plant, collecting water and nutrients from rain. Epiphytes that live in humid environments can take in water and nutrients from the air.

Holding It All Together

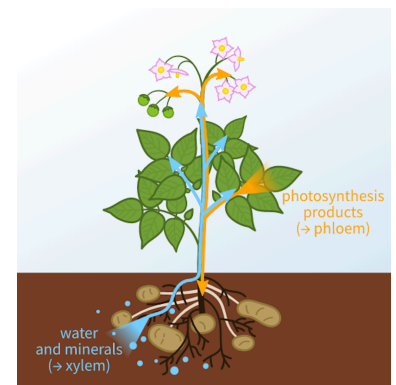
After water and nutrients enter the roots, they move into the stem and up the plant. All vascular plants have stems. The stem starts where the root meets the surface of the ground. It holds up the plant and supports its structure.

The larger the plant, the thicker the stem. Larger plants can have multiple stems. Stems can be soft and **flexible**, allowing the plant to bend. Some plants, such as trees, have stems that are hard and woody.

Image 2. The xylem (blue) carries water and nutrients from the roots upwards. The phloem (orange) carries products of photosynthesis to organs where they are needed (roots, storage organs, flowers, fruits).

The stem contains tube-like structures. The tubes that carry water and nutrients are called xylem. The xylem is made of dead cells and has thick walls. Meanwhile, another structure called the phloem transports plant food to all parts of the plant. The phloem is made of living cells and has thin walls. The xylem and the phloem form the vascular system, and they connect the roots, stems and leaves of the plant.

Stems can also store water and food. Many cacti, for example, store water in their stems and use it little by little.

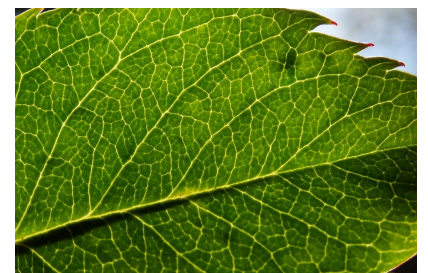


Making Food And Oxygen

After water and nutrients move through the stem, they enter the leaf through the xylem. Next, the water and nutrients move into the veins of the leaf. The veins branch into smaller and smaller passageways, allowing the water to reach all parts of the leaf.

Image 3. Leaves contain veins. Water and nutrients move from the stem and enter the leaves' veins through the xylem. The veins branch into smaller and smaller passageways. This allows the water to reach all parts of the leaf.

Unlike animals, plants can make their own food. This process, called photosynthesis, occurs in the leaves. For photosynthesis to occur, plants need water, energy from the sun, and carbon dioxide, which is a gas in the air.



Photosynthesis produces sugars, which the plant uses for food. It also produces oxygen, which gets released into the air.

The surface of a leaf has microscopic openings called stomata. The stomata open and close to exchange gases like oxygen and carbon dioxide. When they open, the plant loses water in the form of water vapor. This loss of water is called transpiration. For most plants, transpiration occurs primarily on the leaves. Water can also escape from leaves in the form of liquid.

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2. Topic of passage _____

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What causes plants to absorb water?

According to the section "Holding It All Together," how do plants move water through their vascular system? _____

According to the section "Making Food and Oxygen," describe the process of photosynthesis.

Vocabulary Word Work

<p>Choose all the words below that have the same prefix as in the word <i>unnatural</i>.</p> <p>until unit unhappy</p> <p>understand unnecessary uninvited</p>	<p>2. Read the sentence below. Which definition best matches the use of the word <i>ring</i>?</p> <p><u>At Christmastime, volunteers from the Salvation Army ring the bell outside of shopping malls.</u></p> <p>a. jewelry c. to surround</p> <p>b. to sound d. an object in the form of a loop</p>
<p>Circle the correct homophone in the sentences below.</p> <p><i>Their/there/they're</i> are many flavors of ice cream to choose from, and <i>its/it's</i> such a difficult decision to make. <i>Which/witch</i> do you prefer to eat on a warm, sunny day? Most of the time, <i>I/Eye</i> like <i>plain/plane</i> vanilla or chocolate!</p>	<p>Rewrite the sentence below replacing the underlined words with synonyms.</p> <p>I am <u>tired</u> of staying home each and every day. I miss my friends and teachers, and sometimes I feel <u>grouchy</u>. I know that they miss me and <u>love</u> me so much!</p>

