Hi 6th grade scientists and historians-

Attached you will find 3 Science Lessons and 2 Social Studies lessons. Please follow the directions on this page in order to complete the work for Tuesday Jan. 18th. Thank you.

<table>
<tr><th>Date</th><th>Name of Assignment</th><th>Directions/Expectations</th></tr>
<tr><td>Monday 1/10</td><td>Science: What's Blooming (pg. 177-179)</td><td>Complete page 179 to be turned in. Use the background knowledge on page 177 to help you identify each part of a flower and its role in reproduction. The Bonus Box is optional.</td></tr>
<tr><td>Tuesday 1/11</td><td>Science: Spotlight On Cells (pg. 181-183)</td><td>Read the Background Information on page 181. Review the plant and animal cell diagrams on page 182. Highlight key words from the Cell Structure and their Function list on page 182. Complete the activity Playing the Perfect Part on page 183. Note: If you do NOT have scissors or glue at home, you CAN SIMPLY write and sketch the answers in the correct circle. The Bonus Box is OPTIONAL.</td></tr>
<tr><td>Wednesday 1/12</td><td>Science: It's all A Balancing Act (pg. 189-191)

Snapshot means picture or photo. So you are writing the # (number) next to the word under the picture.</td><td>Read the Background Information on page 189. Annotate the Background information box if needed.

Read STEPS 1, 2, 4 and 5 on page 190.

Complete Picture This (page 191) to help you recognize the characteristics of different ecosystems. You may use the INTERNET to help you. Just do your best. Make a guess if you need to.

Hint-
<table>
<tr><th>Ecosystem</th><th># of characteristics</th></tr>
<tr><td>oceans</td><td>4</td></tr>
<tr><td>Wetlands</td><td>3</td></tr>
<tr><td>Forest</td><td>4</td></tr>
<tr><td>Desert</td><td>4</td></tr>
<tr><td>Tundra</td><td>3</td></tr>
<tr><td>Grasslands</td><td>4</td></tr>
</table></td></tr>
</table>

Thursday 1/13	**Social Studies:** Tension Brews in Boston (page 253-255)	**Read** and **annotate** the Background Information on page 253. **Read steps 1 and 5** on page 254. **Complete** *Two Sides to Every Story* on page 255. 1. Decide if you are a **patriot or British** 2. Answer questions 1-6 based on the role **you choose.** 3. Use the background information sheet on page 253, your prior knowledge, and the internet (if needed) to help you complete this activity.
Friday 1/14	**Social Studies:** A Fight for Independence	**Skim the** timeline on page 257 (**Background Information**). Underline or highlight any events that stand out to you. **Page 258-** Read the lesson introduction. Read Step 1. **Read** the Causes **of the American Revolution**. **Complete** page 259 A Time of War : 1. Choose **1 event from page 257 timeline.** 2. Write the NAME of the Event and DATE of the event on your activity sheet (page 259) 3. Use the lines below to summarize the event. You can use the internet, books, or background information. 4. Add an illustration OR print an image from the internet.

Name: _____

MONDAY 1/16

LIFE SCIENCE

What's Blooming?

Watch your students' knowledge of flowering plants blossom with this hands-on lesson.

Skill: Identifying each part of a flower and its role in reproduction

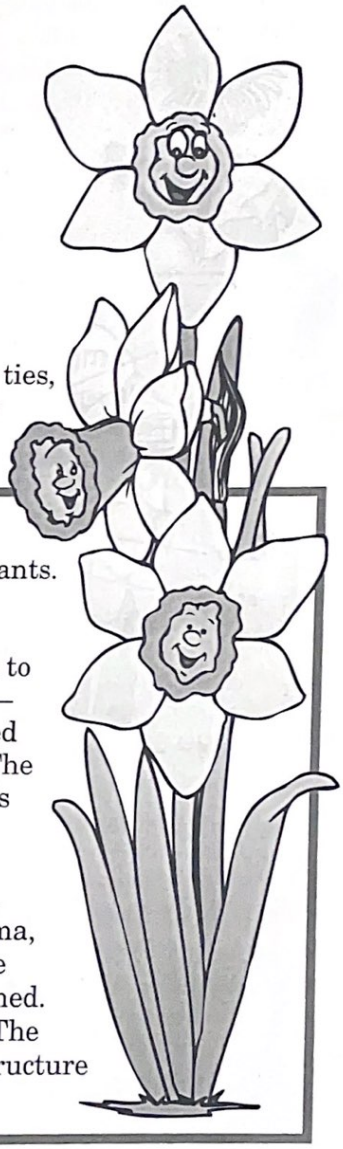
Estimated Lesson Time: 1 hour

Teacher Preparation:

1. Duplicate one copy of page 179 for each student.
2. Make a transparency of page 179.

Materials:

1 copy of page 179 for each student
1 blank transparency
1 index card for each student
assorted craft materials such as pipe cleaners, yarn, bag ties, egg cartons, construction paper, tissue paper, and clay
tape, scissors, and glue



Background Information:

Flowers are the reproductive parts of *angiosperms* or flowering plants. A young flower bud is protected by green leaflike parts called *sepals*.

All flowers are made up of the same basic parts that allow a plant to produce a seed. Most flowers contain both a male part—the *stamen*—and a female part—the *pistil*. The stamen has an enlarged part called an *anther* that grows on the end of a long stalk called the *filament*. The anther produces pollen grains, which develop into sperm. Most pistils have three main parts: the *stigma, style,* and *ovary*.

The transfer of pollen from the anther to the stigma is called *pollination*. The surface of the stigma is sticky to catch pollen grains. A pollen grain will swell as it absorbs sugar and water from the stigma, and it will begin to grow a tube through the slender style down to the ovary. The ovary contains one or more ovules where egg cells are formed. *Fertilization* occurs when a pollen tube enters an ovule in the ovary. The fertilized egg then develops into a seed and the ovary grows into a structure called the *fruit*.

Introducing The Lesson:

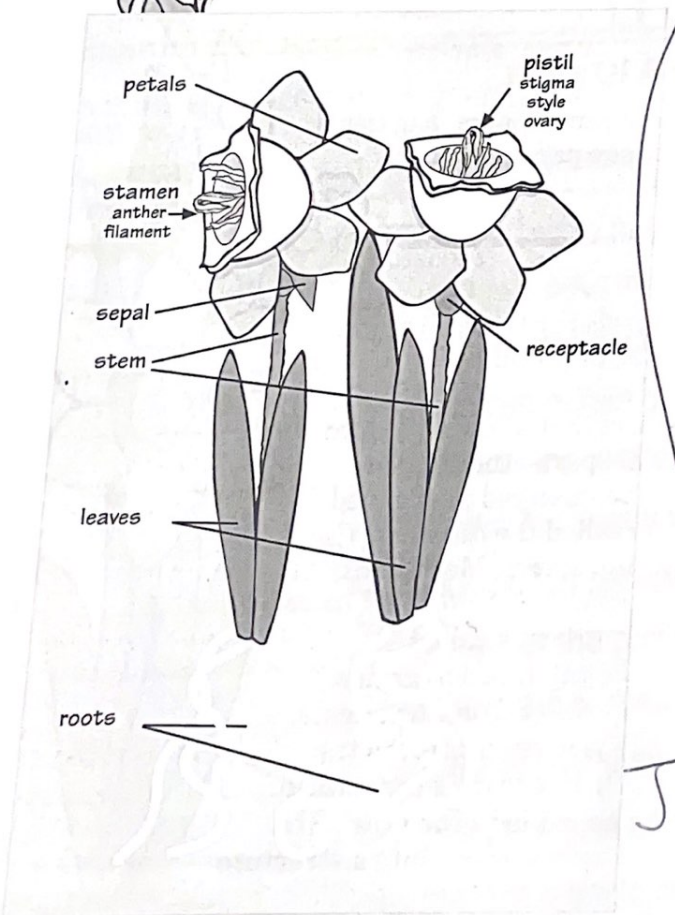
To begin, have students name the main parts of a green plant—*roots, stem, seeds, leaves, flowers.* Ask students if they know the purpose of a flower. Explain to the class that the flower is the reproductive part of the plant.

Steps:

1. Display the transparency you created of page 179 and distribute one copy of page 179 to each child.

Start Here

2. Use the Background Information on page 177 to name each flower part and explain its function in the reproduction of a plant. As you discuss each part, write its name on the line next to the appropriate definition. Have each student copy the information from the transparency onto his paper. Then instruct each student to write each numbered word in the appropriate numbered blank of the illustration at the top of page 179. Tell students to use this reproducible as a reference throughout their study of plants.



3. Divide the class into groups. Provide each group with scissors, tape, glue, index cards, and a variety of craft materials to choose from.

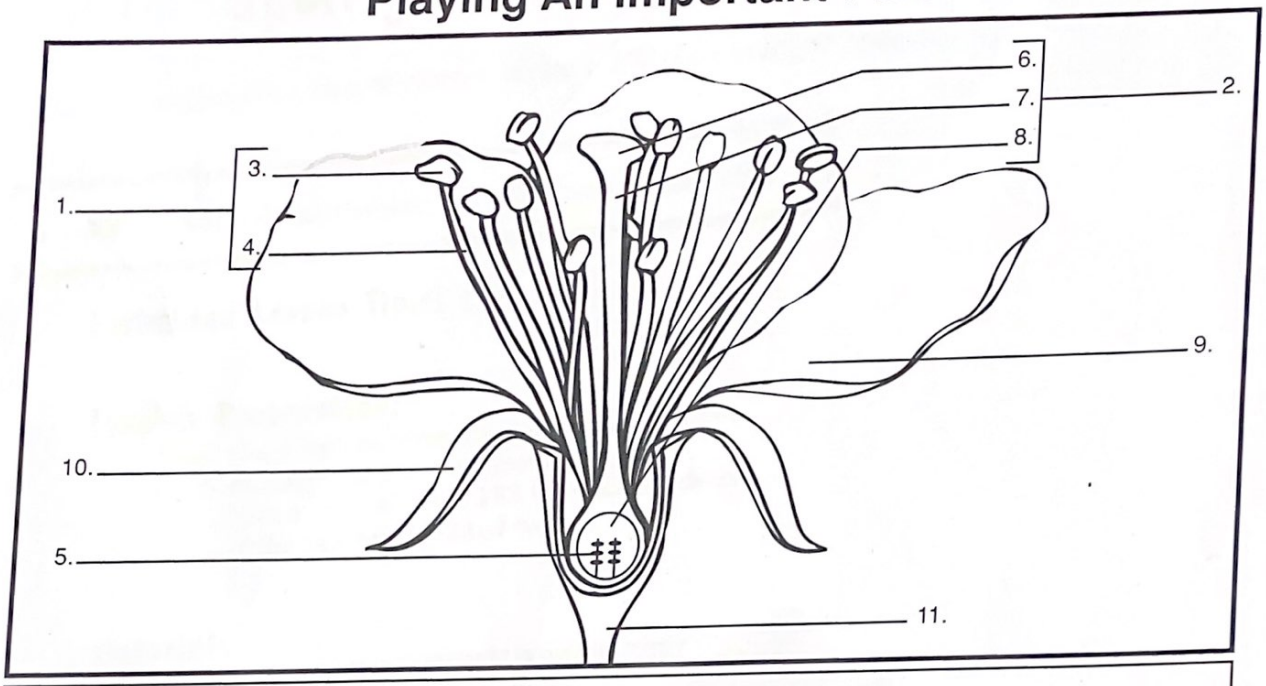
4. Tell each student to create a model of a flower using any materials that are on his group's table. Instruct him to include on the model all the plant parts that were discussed in this lesson. Have him use page 179 as a reference.

5. Have each student write a paragraph on an index card explaining what he used for each part of the flower. Attach the index card to the model flower and display it in the school media center.

Just the Worksheet

Name _____

Playing An Important Part



Parts Of A Flower

• anther	• ovules	• pistil	• sepal	• stigma	• ovary
• filament	• petal	• receptacle	• stamen	• style	

Use the diagram above and the clues to help you fill in the correct plant parts.

1. _____ —male reproductive part of a flower
2. _____ —female reproductive part of a flower
3. _____ —produces pollen grains which develop sperm
4. _____ —supports the anther
5. _____ —become the seeds when sperm cells fertilize the egg cells
6. _____ —sticky, pollen-receptive part of the pistil
7. _____ —the stalk of the pistil down which the pollen tube grows
8. _____ —contains the ovules and becomes the fruit
9. _____ —colorful part of a flower used to attract insects and birds
10. _____ —protects the bud of a young flower
11. _____ —reproductive parts of a plant are attached here

Bonus Box: What do you think is the most important part of the flower? Defend your answer on the back of this paper.

Name: _____

Tuesday 1/11/22

LIFE SCIENCE

Spotlight On Cells

Plant and animal cells are center stage with this helpful lesson.

Skill: Identifying the parts of plant and animal cells

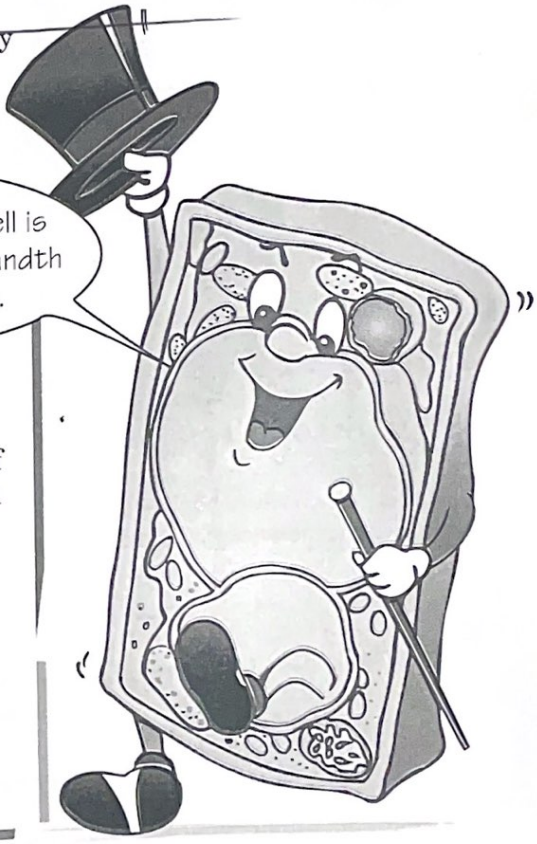
Estimated Lesson Time: 1 hour

Teacher Preparation:

1. Copy the diagram from page 182 onto a sheet of chart paper or a transparency.
2. Duplicate a copy of page 183 for each student.
3. Gather the materials listed below.

Materials:

~~1 sheet of chart paper or a blank transparency~~
1 copy of page 183 for each student
crayons or colored pencils, scissors, glue, and a 9" x 12" sheet of drawing paper for each student



Background Information:

All living things are made up of one or more cells. A cell is the basic unit of structure and function in an organism. There are billions of life forms that consist of a single cell and can be seen only with a microscope. Larger life forms have millions of cells. These larger organisms not only have a greater number of cells, but also have different kinds of cells within the same body. Each cell's structure and contents allow it to do a specialized job and contribute to the process of keeping the organism alive.

Introducing The Lesson:

Have students name the largest animal they can think of. Then ask them what the tiniest living organism and this large animal have in common. *(They are both composed of cells.)*

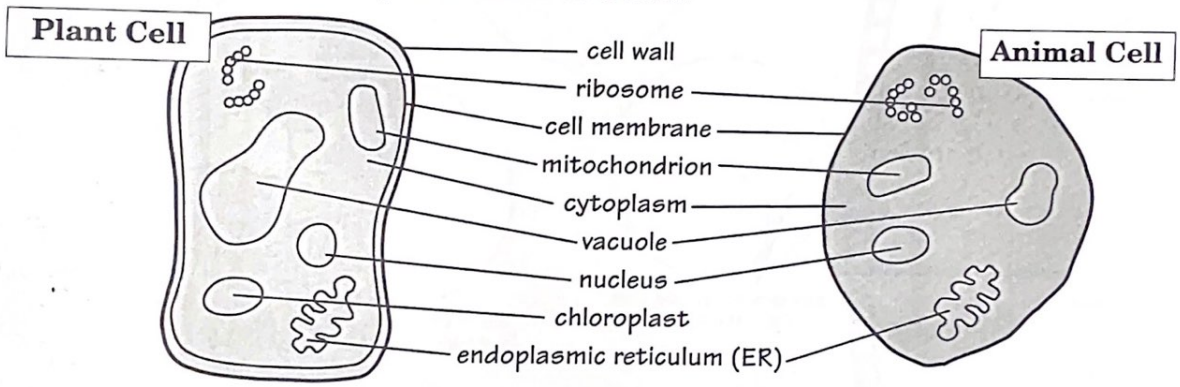
Steps:

1. Share the Background Information on page 181 with your students. Point out that cells, like all living things, are made up of parts.

2. Use the diagram and the definitions below to explain the structure and function of each cell part. Explain to students that these are the main parts of a cell, but not all of them.

3. Have students compare the two cells. Help students recognize that plant and animal cells are basically the same, except for two features. Have students identify these features. *(Plant cells have cell walls and chloroplasts; animal cells do not.)*

4. Distribute one copy of page 183, crayons or colored pencils, scissors, glue, and one 9" x 12" sheet of drawing paper to each student. Have the student complete the sheet as directed. Then check and discuss the completed sheets as a class.



Cell Structures And Their Functions

- cell wall: nonliving structure surrounding a plant cell; provides shape and support
- cell membrane: encloses the cell; controls the inward and outward flow of materials
- chloroplasts: contain chlorophyll and are used by plants to make food
- cytoplasm: jellylike material where chemical processes take place
- mitochondria: rodlike structures that release energy from food and supply energy to other parts of the cell
- vacuoles: fluid-filled sacs that store different substances in liquid form
- nucleus: stores information and controls cell activities; is surrounded by a membrane that separates it from the rest of the cell
- ribosomes: particles in cytoplasm that look like small balls; build the proteins needed by a cell
- endoplasmic reticulum (ER): a network of membranes that run throughout the cytoplasm and form tubes through which materials move to all cell parts

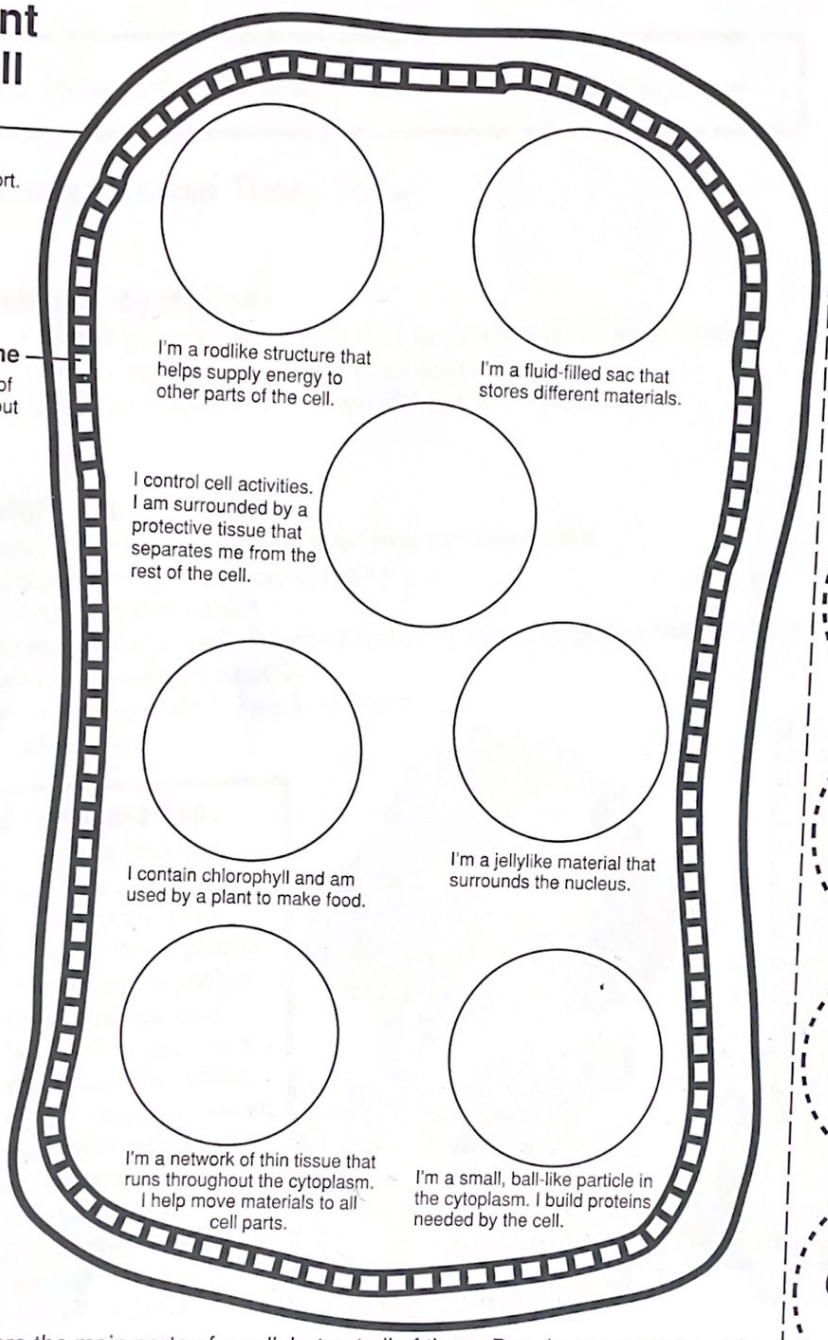
Name _____

Identifying cell parts and functions

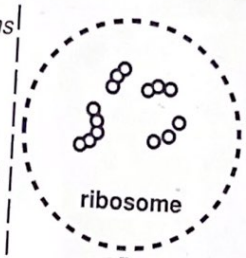
Playing The Perfect Part

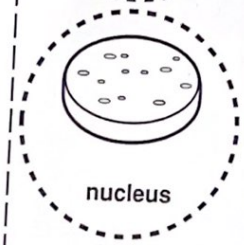
Each part of a cell has a special role to play. Color the pictures on the right-hand side of this page. Cut along the dashed lines of each picture at the right. Read each clue; then glue each circle onto the appropriate place of the diagram.

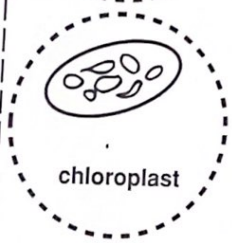
Plant Cell

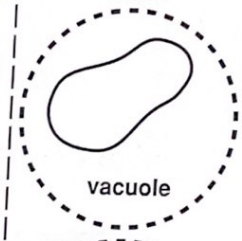


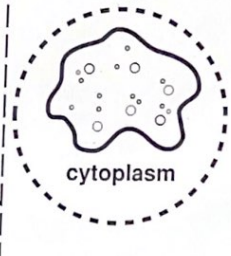
Note: These are the main parts of a cell, but not all of them. Drawings are not to scale.











Bonus Box: Draw an animal cell on another sheet of paper. Color and label each cell part.

Name _____

Wed : Jan. 12

LIFE SCIENCE

It's All A Balancing Act

Help your students understand the delicate balance between plants, animals, and humans within our environment.

Skill: Recognizing the characteristics of different ecosystems

Estimated Lesson Time: 1 hour

Teacher Preparation:

1. Collect pictures of plants and animals within an ecosystem.
2. Gather research materials on ecosystems.
3. Duplicate one copy of page 191 for each student.

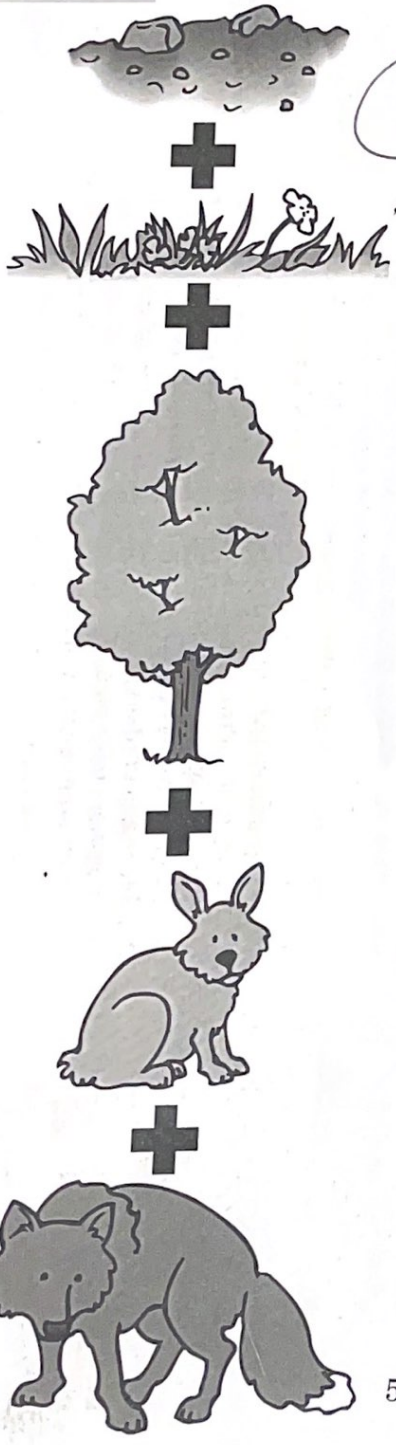
READ

Materials:

pictures of plants and animals from an ecosystem
research materials on ecosystems
6 sheets of chart paper
6 large, light-colored sheets of bulletin-board paper or butcher paper
markers or colored pencils
1 copy of page 191 for each student
encyclopedias

Background Information:

An *ecosystem* includes the community of plants and animals that live within a certain area of our environment. These plants and animals rely on one another for survival: food, shelter, and protection. The earth supports a variety of ecosystems, including *deserts, forests, the tundra, oceans, grasslands,* and *wetlands.* Each ecosystem has its own unique characteristics, such as climate, terrain, and plant and animal life. The connection between the plants and animals within the ecosystem is so strong that any singular change can affect the balance of an entire ecosystem.



Introducing The Lesson:

Show students several pictures of various plants and animals with a particular ecosystem, such as wetlands or a desert. Ask students explain any relationships between the plants and animals in these pictures. *(Example: The trees are supported by the soil, the coyote liv among trees, the coyote preys upon rabbits, rabbits eat plants, and plants are supported by the soil.)*

Steps:

1. Explain to students that plants, animals, and their surroundings are all linked together. They rely upon one another in wh we call an *ecosystem*.

2. Tell students that the earth supports a variety of ecosystems including the following: *deserts, forests, the tundra, oceans, grasslands,* and *wetlands.* Each ecosystem has its own unique characteristics, such as climate, terrain, and plant and anima life. Ask students to name a specific characteristic of one of th ecosystems. *(Examples: The climate of the tundra is very, very cold. Oceans are composed of salt water.)*

3. Divide students into six groups and assign each group an ecosystem. Supply each group with research materials, a large piece of bulletin-board or butcher paper, and markers or colore pencils. Instruct each group to research the climate, terrain, and plant and animal life of its ecosystem. Then have each group draw a mural illustrating the characteristics of its ecosystem. Instruct each group to include at least five exampl of interdependence among the inhabitants of its ecosystem. Finally have each group label and color its mural, then share its findings with the rest of the class.

4. Explain to your students that the connection between the plants and animals within an ecosystem is so strong that even a small change can affect the balance of the entire ecosystem. Appoint one member of each group as Recorder, giving each Recorder a piece of chart paper and a marker. Then have the class brainstorm as many changes as possible that would upse the balance of each ecosystem, including interference by humans. As each ecosystem is discussed, have that group's Recorder write the information on his piece of chart paper. Display the murals and the lists of changes in the hallway for all to view.

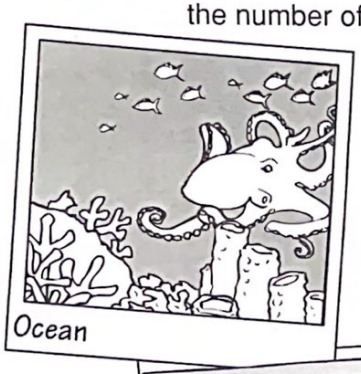
5. Give one copy of page 191 to each student. Have the student complete the page as directed.

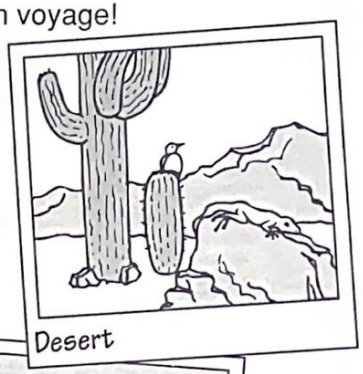
Name _____ *Research activity*

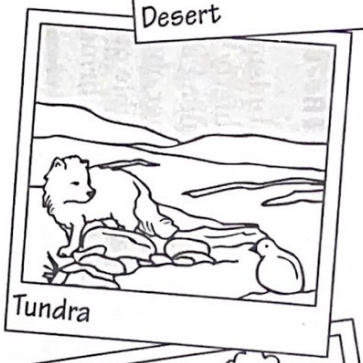
Picture This!

Picture this—you're a world traveler studying the earth's numerous ecosystems: *deserts, forests, the tundra, oceans, grasslands, wetlands.* Each ecosystem has its own characteristics—such as climate, terrain, and plant and animal life—that make it unique.

Directions: Read each sentence below. Decide which ecosystem the sentence is describing. Then write the number of that fact in the appropriate snapshot. If you need help, use an encyclopedia. Bon voyage!







1. I'm a large expanse of land covered with tall grasses.
2. I'm also known as a *prairie* or *savanna.*
3. I cover one-seventh of the earth's land surface, but because of environmental changes, that amount is increasing.
4. My temperature range is from less than 0°C to never above 10°C.
5. I cover about 70 percent of the earth's surface.
6. I cover about 30 percent of the earth's land.
7. I receive less than ten inches of moisture a year.
8. I have a variety of plants and animals that live at different depths.
9. Most of my land in the United States has been plowed under and used for agricultural land.
10. I don't receive enough precipitation to support large trees.
11. I provide homes for birds, insects, and animals, as well as sources of medicines.
12. I can be located near an ocean and contain salt water, or in forests and contain freshwater.
13. I'm an area that helps absorb carbon dioxide, produce oxygen, and prevent erosion.
14. I can be located in very cold or very warm climates.
15. The ground below my surface stays frozen all year.
16. I'm the name for the plains of the arctic circle.
17. I'm primarily salt water.
18. Many plants and animals thrive in my hostile environment.
19. I provide homes for birds, fish, animals, and insects.
20. I include many species of fish and invertebrates.
21. My areas contain permanent moisture: bogs, swamps, marshes, estuaries, ponds, lakes, and rivers.
22. I contain tropical, temperate, coniferous, and deciduous trees.

Name: _____

Thursday

U.S. HISTORY

Tension Brews In Boston

Help students investigate the reasons behind the Boston Tea Party with this thought-provoking lesson.

Skill: Identifying and understanding the reasons behind the Boston Tea Party

Estimated Lesson Time: 1 hour

Teacher Preparation:

1. Duplicate one copy of page 255 for each pair of students.
2. Gather various resources and references on the American Revolution.

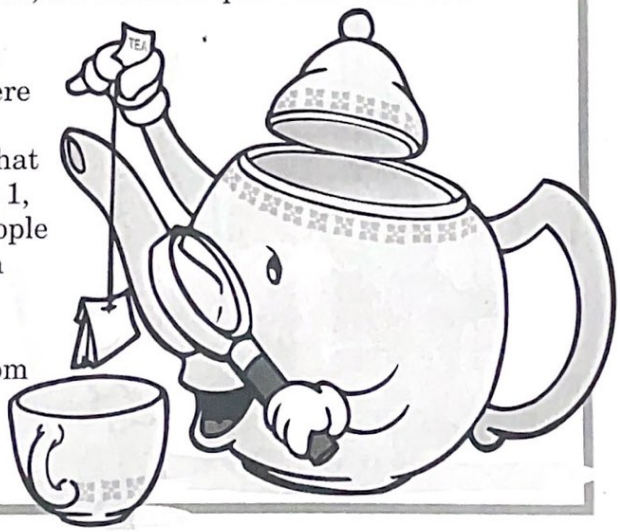
Materials:

1 copy of page 255 for each pair of students
reference materials

Background Information:

In December 1773, the British ships *Dartmouth, Eleanor,* and *Beaver* sailed into Boston harbor loaded with tea. The patriots of Boston were tired of paying English taxes on tea and gave their governor a deadline, December 16, 1773, to send back the tea. When that day arrived, the ships were still in the harbor. Patriot leaders gave the governor one last chance to send back the tea. When he refused, the patriots disguised themselves as Indians and hurried to the ships. Upon reaching the wharf, they divided into three groups, led by Samuel Adams, John Hancock, and Paul Revere. As a protest, the men dumped more than 300 chests of tea into the harbor.

Shortly thereafter, Paul Revere took to his horse and spread the news to other colonists. Patriots were questioned, but nobody talked. The colonists were punished with the Boston Port Bill, which stated that no ship was allowed to enter the harbor after June 1, 1774, until the patriots had paid for all the tea. People in the other 12 colonies also had tax problems with the British. So when word spread that the Boston harbor had closed, the other colonies sent rye and flour to help the people of Boston. Wagons came from South Carolina piled with rice. Maryland sent wheat. Although the Boston colonists were often hungry, they refused to give in to the king's orders.



U.S. HISTORY

Introducing The Lesson:

Begin this lesson by sharing the facts surrounding the Boston Tea Party found in the Background Information on page 253.

Steps:

1. Point out that there are often two sides to a situation. Have students identify the two conflicting sides of the Boston Tea Party *(the patriots and the British)*. Then explain that both sides had their own specific reasons for what they were doing.

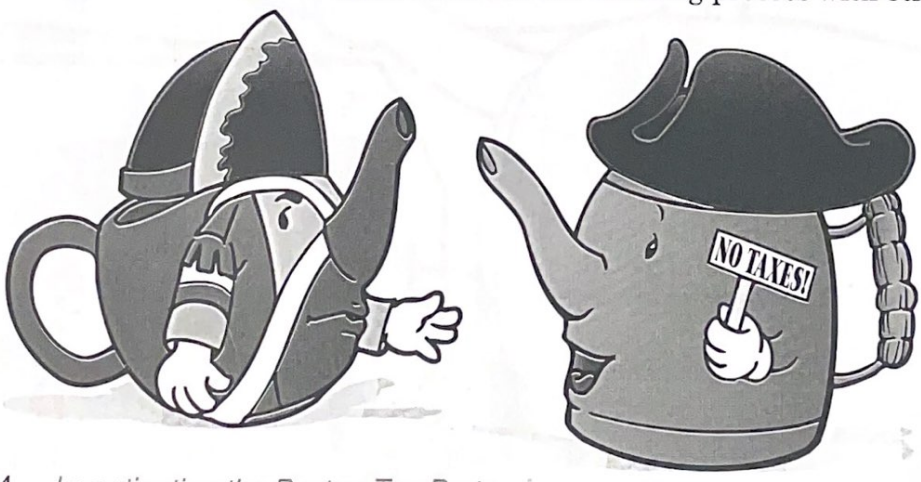
2. Hold a class discussion in which students give examples of times when they were told to do something that they didn't support or believe in and weren't able to express their points of view on the situation. For example, maybe a student's parents made him take piano lessons even though he would have rather played on the soccer team.

3. Pair students and assign each pair a side, either British or patriot. Using a social studies text and/or other reference materials, have each pair research its respective side of the taxing of tea and the Boston Tea Party.

4. Give each pair one copy of page 255.

5. Instruct each pair to use its reproducible to outline its reasons for and feelings about either taxing the tea, if British, or tossing the tea overboard, if a patriot.

6. Select a British pair and a Patriot pair to present their cases in a debate in front of the class. Challenge pairs to argue their points, using their sheets as guides. Be sure to establish some debating rules such as no interruptions and time limits for each pair's responses. After the debate, have the two pairs answer questions from the audience. Continue the debating process with other pairs if time allows.



Names _____

Two Sides To Every Story

The Boston Tea Party was one of America's first acts of independence. The British, however, had their reasons for taxation, too. Using the new identity your teacher has assigned to you, fill out this sheet and explain your actions during the famous Boston Tea Party.

1. Who I am (patriot or British):

_____

2. Why I did what I did:

_____
_____
_____
_____
_____
_____

3. Why the other side did what they did:

_____
_____
_____
_____
_____

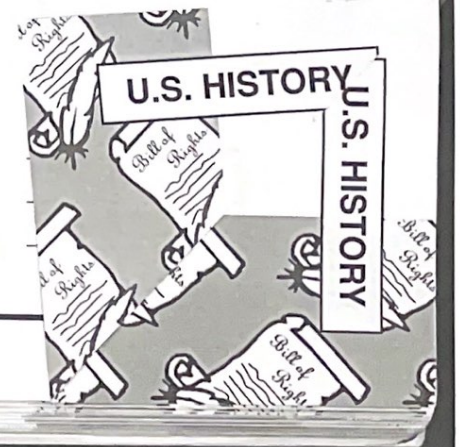
4. How I feel about my actions:

_____
_____
_____
_____
_____
_____
_____
_____

5. What I would do differently if I had it to do over again:

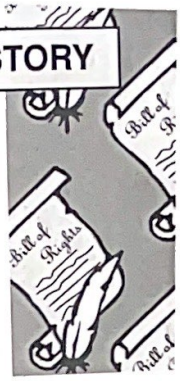
_____
_____
_____
_____
_____
_____

6. How this event changed history:



Name: _____

FRIDAY



A Fight For Independence

Help your students catch the spirit of '76 as they study this classic conflict with the following Revolutionary lesson!

Skill: Identifying and researching important events from the Revolutionary period of American history

Estimated Lesson Time: 45 minutes

Teacher Preparation:

Duplicate one copy of page 259 on heavyweight paper for each student.

Materials:

1 copy of page 259 for each student
crayons
reference materials

Background Information:

From 1775 to 1783 the Revolutionary War was fought between Great Britain and its 13 American colonies. The American colonies were successful in their battle for independence. As a result, the United States of America was formed.

Important Events Of The American Revolution

April 19, 1775 Redcoats and minutemen fight at Lexington and Concord.
June 15, 1775 George Washington is named commander-in-chief of the Continental Army.
June 17, 1775 The Battle of Bunker Hill takes place.
July 4, 1776 The Declaration of Independence is adopted.
August 27, 1776 British defeat Americans on Long Island.
December 26, 1776 Washington leads a surprise attack on Hessian troops at Trenton.
January 3, 1777 Americans win the battle at Princeton.
September 11, 1777 British defeat Americans at Brandywine.
September 26, 1777 Philadelphia is occupied by the British.
October 4, 1777 American troops are defeated in the Battle of Germantown.
December 19, 1777 Washington and troops move to winter quarters at Valley Forge.
February 6, 1778 France signs an alliance with the Americans.
February 25, 1779 British troops at Vincennes surrender to George Rogers Clark.
June 21, 1779 Spain declares war on Great Britain.
May 12, 1780 Charleston falls after a British attack.
August 16, 1780 British defeat Americans at Camden.
March 15, 1781 Cornwallis battles Greene at Guilford Courthouse.
September 5, 1781 British fleet is heavily damaged by French naval fleet at Chesapeake Bay.
October 19, 1781 Cornwallis's forces surrender at Yorktown.
November 30, 1782 British and Americans sign a preliminary peace treaty in Paris.
April 15, 1783 U.S. Congress ratifies preliminary peace treaty.
September 3, 1783 Final peace treaty between Great Britain and the United States is signed in Paris.

Introducing The Lesson:

Explain to students that an *effect* is the result of a cause or set of causes Tell students that the Revolutionary War was an effect; then ask them t think about possible causes of the war. Invite students to share several causes aloud; then record students' responses on the board.

Steps:

1. Point out to students that while there were many key events that caused the Revolution, there were also many important events tha occurred during the war.

2. Divide your class into pairs. Ask each pair to use a variety of reference materials to find important events that occurred during the Revolution. Have each pair record its findings on a sheet of paper. Combine each pair's responses to make a large list of important wartime events.

3. Assign each student a specific event from your class list or the list on page 257 to research. Then provide each student with one copy of page 259.

4. Instruct each student to follow the directions as written on page 259 to complete the activity.

5. Display your students' frames in chronological order on a bulletin board or wall to create a timeline of the Revolutionary War.

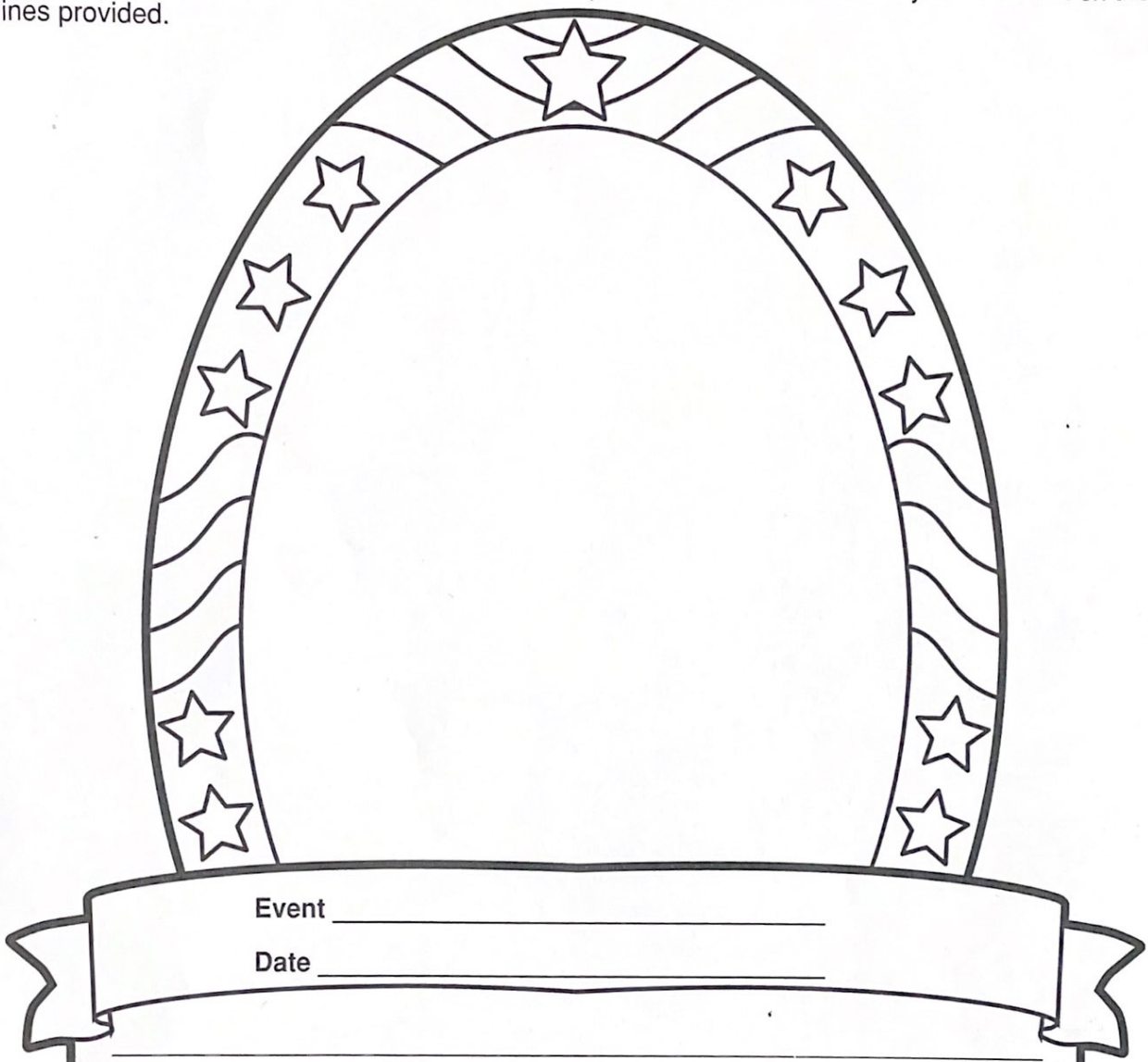
Causes Of The American Revolution

- 1763—Parliament issued the Proclamation of 1763.
- 1765—Parliament passed the Stamp Act.
- 1767—Parliament passed the Townshend Acts.
- 1768—British soldiers moved into Boston, which eventually triggered the Boston Massacre in 1770.
- 1773—Boston colonists took part in the Boston Tea Party.
- 1774—The British passed strict laws that colonists called the Intolerable Acts.

Name _____ *The Revolutionary War: researching, summarizing*

A Time Of War

Directions: Illustrate an important event from the Revolutionary War inside the frame below. Record the title and date of the event in the ribbon; then write a short summary of the event on the lines provided.



Event _____

Date _____

Name _____