Dinosaur Discoveries
by Gail Gibbons

ABOUT THE BOOK

Boom! A giant meteor blasts an enormous crater into Earth’s surface, causing the end of what scientists call the Age of Dinosaurs. Here are the most recent theories about the history of dinosaurs, along with amazing facts about dinosaur discoveries. Gail Gibbons discusses the Triassic, Jurassic, and Cretaceous periods and many of the non-bird dinosaurs that lived during each of those times.

LESSON IDEAS

Make Fossils

Dinosaurs died millions of years ago, but their bones live on in the form of fossils. Students can make their own fossils. First have students collect leaves, flowers, seeds, shells, or pinecones. Pack 1 inch of sand at the bottom of a paper cup. Mix plaster of Paris in a 2:1 ratio (2 parts plaster/1 part water). In order to have enough, you’ll need 3 cups of plaster and 1 cup of water. Insert the “fossil” into the sand and pour plaster over it. Let it sit for 24 hours, then turn the cup over and rinse off the sand to reveal the fossil. Have students attempt to identify the item from which each other’s fossils were made.

Dinosaurs: How Big Are They?

Help students understand and appreciate the magnitude of these creatures. First have students select a dinosaur and collect data about the name, length, and height. You’ll need a large area such as blacktop or concrete, where students can draw the dinosaur to full scale. Measure the height and length to show students the area of their full-scale outline drawing before they start using chalk. When their drawing is complete, have some students stand at the head and others stand at the tail to view and compare the lengths of their bodies.

Name a Dinosaur

A dinosaur is given a name depending on what it looked like, who found it, the place where it was found, or how it behaved. Have students invent their own dinosaurs and give them names to explain where they were found, who found them, what they looked like, or how they behaved. As an extension, have children write “A day in the life of ____” about their chosen dinosaur—including what it did, what it ate, and what it would have seen, such as other dinosaurs or interesting landscapes.

Dino-Discussion

Engage students in a lively discussion about dinosaurs by asking the following questions: Which group of animals did dinosaurs belong to—reptiles, amphibians, or mammals? (Dinosaurs were reptiles.) Were there any flying dinosaurs? (No, dinosaurs lived on land. There were, however, many flying reptiles that were related to the dinosaur.) What color was the Tyrannosaurus rex? (No one knows, because all that remains is the bones.) Then ask students to hypothesize why scientists portray dinosaurs as green. Find pictures of the following: Komodo dragon, chameleons, horned toads, iguanas, and crocodiles. Ask students to identify them as alive or dead. All are alive but look very similar to dinosaurs. Discuss the similarities and differences of each and compare them to the dinosaur. Ask students to think of any other animal that might have been a descendant of the dinosaur. How many students were surprised to learn that birds are descendants of dinosaurs?

OTHER TITLES TO CONSIDER:

Penguins!
Their habitat, physical characteristics, and behavior.
Hardcover • 0-8234-1388-8
Paperback • 0-8234-1516-3

Polar Bears
Their physical characteristics and how they adapt to their environment.
Hardcover • 0-8234-1593-7
Paperback • 0-8234-1768-9
Dinosaur Match

Match the dinosaur name to its definition.

1. ___ *Tyrannosaurus*  
   A. “roof lizard”

2. ___ *Stegosaurus*  
   B. “good mother lizard”

3. ___ *Polacanthus*  
   C. “three-horn face”

4. ___ *Lambeosaurus*  
   D. “large lizard”

5. ___ *Maiasaura*  
   E. “tyrant lizard”

6. ___ *Pentaceratops*  
   F. Named after Lawrence Lambe, a famous paleontologist

7. ___ *Lesothosaurus*  
   G. Named for Lesotho, a city in South Africa, where it was found

8. ___ *Triceratops*  
   H. “five-horn face”

9. ___ *Plateosaurus*  
   I. “many spikes”

10. ___ *Oviraptor*  
    J. “egg robber”

LESSON IDEAS

Cloud Observation

There are many different types of clouds in the sky. Students will observe and make homemade clouds with cotton, glue, blue construction paper, and markers. Take the children outside and ask them to describe what the sky looks like. Have them select one cloud and make a copy of it with the cotton and glue. Assist them by asking questions: Is your cloud all white? Is it puffy? What shape is it?, etc. After each child has made his or her clouds, discuss the similarities and differences of the clouds that were copied and group them as such. Repeat this activity on two or three days when the clouds are noticeably different.

Evaporation

Students will understand the concept of evaporation and the role it plays in weather, in particular the water cycle. Fill two clear jars with equal amounts of water. Mark and date the water level on each jar. Cover the top of one jar with plastic wrap. Ask students to predict what will happen to the water in each jar. Have students keep an observation journal. In their journals, students will draw and label the two containers, along with the date and their predictions. Every several days, ask students to check the water levels in the jars, marking the date and new levels on the jar if necessary. Students should record the findings in their journals after each observation. After a couple of weeks, the water in the open jar should show signs of disappearing (or evaporating) while the covered jar should have water droplets (condensation) on the plastic wrap. When these water droplets fall back into the jar, it is simulating rain, keeping the water level fairly constant in the closed jar. Discuss the findings with the students.

Weather Graph

Display a large calendar for the month. Have students cut out yellow suns, blue raindrops, white clouds, etc. Make sure there is enough for each day of the month. Each day, ask a student to describe the weather and record the findings by taping an appropriate symbol to the corresponding day on the calendar. Repeat so every child has had a turn playing weatherperson. At the end of the month, have students count the number of sunny, rainy, and cloudy days. Make a large bar graph to display the results. Distribute a corresponding sheet so each child can create his or her own graph.

Raining Cats and Dogs

Read aloud the section on the last page of Weather Words and What They Mean about the rainfall of fish and frogs in France. Then ask students if they’ve ever heard the expression “It’s raining cats and dogs.” Have students come up with a theory about where this expression came from and write a short story about it. Share the stories with the class.

OTHER TITLES TO CONSIDER:

Valentine’s Day Is...
How it is celebrated and why it is a special day for love and friendship.

Hardcover • 0-8234-1852-9

Valentine’s Day

Giant Pandas
They are indigenous to China and adored all over the world.

Hardcover • 0-8234-1761-1
Paperback • 0-8234-1828-6
Reproducible Activity

<table>
<thead>
<tr>
<th>Name________________________</th>
<th>Date________________________</th>
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**Weather Words**

Follow along with *Weather Words and What They Mean* by writing as many weather words as you can in each category in the chart below. Keep it in your weather journal and use the words so you’ll be able to report the weather like a pro!

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Air Pressure</th>
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<table>
<thead>
<tr>
<th>Moisture</th>
<th>Wind</th>
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</table>
The Reasons for Seasons
by Gail Gibbons

ABOUT THE BOOK

Why is there winter in the Southern Hemisphere at the same time there is summer in the Northern Hemisphere? Here is an explanation of how the position of Earth in relation to the sun causes seasons, and the wonders that come with each one of them. Summer. Autumn. Winter. Spring comes again. Year after year the seasons repeat themselves.

LESSON IDEAS

Four Seasons: Cooperative Grouping
Hold a class discussion about the characteristics of each season. Ask students to talk about things associated with each season. Discuss and list on chart paper things to do, see, feel, hear, wear, etc. This is a good way to integrate lessons on the five senses. It’s best to do one season at a time, perhaps one a day over the course of a week. On the fifth day divide students into four groups, each group representing a different season. Distribute large poster paper to each group, one per group. Each group will work together to illustrate each season, incorporating the results of the week’s discussions. Display the posters on a bulletin board divided into four windowpanes. As an extension activity, have each student complete the following sentence: My favorite season is __________. I like __________ because __________. Once illustrated, collect and assemble into a class book.

Seasonal Calendar: Math
Use a calendar to group the months by seasons: spring (about March 21), summer (about June 21), autumn (about September 21), winter (about December 21). Photocopy calendar pages onto overhead transparencies. As a class, determine the number of days and weeks in each season by counting on the calendar. Count various things, such as the number of full moons, half moons, new moons, holidays, etc. Keep a class chart of the results.

The Seasons: A Demonstration
Students will be able to demonstrate why the seasons change by using a globe and a flashlight. Show the class how Earth turns on its axis by spinning the globe. Explain that the axis is tilted and that the tilt never changes. Use a lamp (without the lamp shade) as a model of the sun. Ask for a volunteer to hold the globe and slowly spin it while circling the lamp. Have the student stop at different places during the globe’s orbit. After each stop, ask students which part of Earth would be warmer and cooler. Ask further questions, such as “Is it summer for the people in the Northern Hemisphere?” “Is the sun brighter for the people in the Southern Hemisphere?” “Why, why not?” etc.

Creative Writing
Get the students’ creative juices flowing with this fun writing activity. Ask students if they have ever heard of the following expressions: “spring fever,” “winter blues,” “dog days of summer.” Brainstorm with the class the meaning of each saying. Then discuss the actual definition. Challenge them to create a saying for autumn, such as “falling into autumn.” Then have students come up with a cure for spring fever and winter blues. Have them write their cures on two separate pieces of paper. When finished, glue each piece on either side of a piece of construction paper. Hang the papers from the ceiling tiles and throughout the classroom. If posting them on a bulletin board, entitle it “Seasonal Rx.”

OTHER TITLES TO CONSIDER:

The Moon Book
Facts about the moon, including eclipses and its different phases.

St. Patrick’s Day
The story of Patrick’s life and how the day is celebrated.
The Reasons for Seasons Vocabulary Match

Earth and its many relationships to the sun are the reasons for the seasons. Match the seasonal words with the proper definition.

1. ___ Winter Solstice  
2. ___ Vernal Equinox  
3. ___ Equator  
4. ___ Earth’s Axis  
5. ___ Summer Solstice  
6. ___ Autumn Equinox

A. Line that goes through Earth joining North and South Poles
B. Spring Equinox
C. Line that goes around Earth dividing the northern half of Earth from the southern half
D. Shortest day of the year
E. On this day, daylight and darkness are about the same length of time over the entire Earth
F. Longest day of the year

Horses!
by Gail Gibbons

ABOUT THE BOOK
No other animal has captured people’s imaginations or changed their lives as have horses. Their grace, strength, and beauty have made horses sought after as well as useful. What would kings and queens, knights and conquistadors, cowboys and stagecoach drivers, or farmers have done without them? In this informative book, Gail Gibbons relates some of the long history horses and humans have shared. She looks at horse biology and behavior, and includes colorful, clear, and accessible diagrams that will interest all who want to know more about these popular animals.

LESSON IDEAS

Horse Measurement
Horses are measured in “hands,” from the ground to the withers (the highest part of the horse’s back between the shoulder blades). Introduce students to the method used for measuring horses. You’ll need masking tape, a yardstick, colored paper, and scissors. Have each student trace his or her hands on a piece of paper. Then, on colored paper, photocopy each student’s pair of hands. Divide students into pairs and have them first measure each other’s heights with a yardstick. One student stands with his or her back to a wall while the other marks the height with masking tape. Each student writes his or her name on the corresponding piece of tape. Then have students cut out their traced hands and tape them to the wall, measuring their height in “hands.”

Horse Acrostic
Students will write an acrostic poem about horses. First, brainstorm with the class various words that would describe a horse and write the responses on chart paper. Model how to write an acrostic poem. You can even create a horse acrostic as a class to further brainstorm words beginning with each letter of HORSE. Photocopy the paper containing HORSE written vertically and distribute the copies to the students. When each student has completed his or her poem, share the poems with the class. Display the poems on a bulletin board entitled “From the Horse’s Mouth.”

Research Your Favorite Horse
There are many different breeds of horses, and some are known for their special characteristics. Review the various types of horses with the class. Then have students select a horse that they’d like to research. Have students use the library or media center to conduct their research. The school librarian will be a wonderful resource and partner for this project. Each student should collect five to ten facts about the horse he or she has chosen and write a report about it. The students can illustrate the report or cut out magazine pictures if available. Students should share their reports with the rest of the class before hanging them throughout the classroom.

Why Are Horses Important?
Hold a class discussion about the usefulness of horses. Ask students the question: Why are horses important? Discuss the impact that horses have had in history, from helping people plow fields to their use in battle. Remind students that riding a horse was once considered the best and fastest way to travel. Expand the discussion to modes of transportation today. Lay three large pieces of colored construction or poster paper on the floor to represent the different venues of travel (white for sky, blue for water, brown for ground). Have students work in groups to fill each piece of paper with the appropriate types of vehicles for today’s travel. They can cut out pictures from magazines or draw them. Have some obscure examples on hand in case the children run out of ideas (e.g., jet skis, hot-air balloons, tugboats, helicopters). Be creative.

OTHER TITLES TO CONSIDER:

Chicks & Chickens
Their physical characteristics, behavior, and life cycle, and how eggs develop.
Hardcover • 0-8234-1700-X
Paperback • 0-8234-1939-8

Rabbits, Rabbits & More Rabbits!
Describes different kinds, behavior, where they live, and how to take care of them.
Hardcover • 0-8234-1486-8
Paperback • 0-8234-1660-7
Reproducible Activity

Name__________________________ Date__________________________

Horse Facts

Below are some facts about horses—some are true, some are false. Place T next to every true statement and F next to all that are false. Be careful!

1. _____ Wild horses are protected by law.

2. _____ An ends-up horseshoe is a symbol of bad luck.

3. _____ A purebred horse has a mother and father from different breeds.

4. _____ Horses don’t eat meat.

5. _____ Horses breathe through their mouths, as other animals do.

6. _____ Horses are very social animals and can communicate using different body movements.

7. _____ Horses’ eyes move independently of each other.

8. _____ A pony is the biggest-sized horse.

9. _____ Horses are the only animals that stand on only one toe on each foot.

10. _____ A horse’s height is measured in feet.

From Seed to Plant
by Gail Gibbons

ABOUT THE BOOK
Do you know how a seed begins? What pollination is? How flowers, fruits, and vegetables get to be the way they are? The mystery of how seeds are formed and grow into plants is revealed for young readers in this informative book.

LESSON IDEAS

Properties of Seeds
Students will be able to distinguish and classify an assortment of seeds. Bring in a variety of seeds (bean, sunflower, apple, etc.) and distribute them to the children. Students can work alone or in groups. With a magnifying glass, students should examine the seeds, comparing and contrasting each seed. Have students record their findings on a property chart to include size, shape, color, texture, etc. They should feel free to draw pictures of the seeds as well.

Seed in a Bag
Have you ever wondered what the growth process looks like underground? Students will be able to watch the progression by creating individual plastic-bag greenhouses. Each student will need a Ziploc bag, wet paper towels, and quick-sprouting seeds (e.g., radish, peas). Students can put different seeds in separate rows or use a different bag for each seed. They should keep a daily “Plant Journal” to record all observations along the way. First, place the wet (but not too wet) paper towel in the plastic bag. Then place the seeds in the bag and lock the bag. Arrange the bags on a shelf or windowsill. Within 3 weeks the seeds should sprout. Students will be able to examine germination and document the progress in their Plant Journals.

Art Project: Coffee Filter Flower
Discuss the parts of a flower. Distribute a coffee filter, construction paper, and watercolor paint to each student. With a dab of glue, attach the coffee filter to a piece of construction paper. Have students use the watercolors to paint the coffee filter, creating an abstract flower. Once dry, students should draw and label the parts of a flowering plant. Hang the finished art projects throughout the classroom.

Colorful Garden
Hold a class discussion about what seeds need in order to grow (light, water, etc.). Inform students that they’ll be starting their own colorful garden of flowering plants. Sunflowers, marigolds, and snapdragons would be good selections. Begin by distributing peat pots to the students and having them plant and water the seeds. Set the pots on the windowsill. Students should record all activity in a daily Plant Journal. They should predict how long the seeds will take to grow and what the flower will look like once it has bloomed. When the plants are well established, students can plant them on the school grounds, creating a beautiful garden of color. Peat pots can be planted directly in the ground.

OTHER TITLES TO CONSIDER:

Farming
The activities and special qualities of farm life throughout the year.
Hardcover • 0-8234-0682-2
Paperback • 0-8234-0797-7

Pigs
Interesting facts about the smartest of all farm animals.
Hardcover • 0-8234-1441-8
Paperback • 0-8234-1554-6

Holiday House
www.holidayhouse.com
Think of four words that begin with PL and write them in the petals of the flower. As a challenge, use each PL word in a sentence and write in the lines below.

1. 

2. 

3. 

4. 

Monarch Butterfly
by Gail Gibbons

ABOUT THE BOOK

From egg to caterpillar to butterfly, here is the story of how monarchs live. Eggs are almost always laid on milkweed plants, which provide food. From the egg crawls a caterpillar, which molts about five times before the miracle of metamorphosis turns it into a butterfly. In her usual clear and concise manner, Ms. Gibbons explains the wonder of these delicate creatures that can fly as high as 2,000 feet and migrate up to 4,000 miles.

LESSON IDEAS

Discussion Questions

Hold a class discussion about butterflies. Begin by assessing what students actually know about butterflies. Ask students what additional information they want to learn about butterflies. Then read Monarch Butterfly aloud. Evaluate students’ comprehension of the subject by asking the following questions: What are the four stages of the butterfly’s life cycle? (egg, caterpillar or larva, pupa, butterfly) What happens once the caterpillar reaches its full growth and is ready to enter the pupa stage? (attaches itself to a leaf and spins a chrysalis) Why and to where does the monarch butterfly migrate? (south, because the cold will kill the butterfly)

Brilliant Butterflies: An Art Project

Talk about the brilliant colors of butterflies. Have the children trace their feet on bright-colored construction paper to make butterfly shapes. Then have them draw a body shape between the two “butterfly wings.” Cut out the butterfly and glue narrow strips of black paper for the antennae. Decorate the butterflies with bits of bright fabric, tissue paper, or construction paper. Hang them from the overhead light fixtures with colored yarn. As an extension math lesson, have students measure the wingspan of their butterflies and record it on a class chart. Compare those measurements to that of a monarch butterfly, whose wingspan can be as long as 3 inches.

Butterfly Attraction

Discuss what attracts butterflies. (fruit, flowers) Conduct a class experiment to see which item will attract the butterflies. Cut up fruit and mix it with sugar water. Place the fruit mixture in a plastic container and hang the container outside the classroom window for easy observation. Do the same with flowers if possible. If not, just do this exercise with the fruit. Create a class chart to record all the visitors that the fruit and/or flowers attracted.

OTHER TITLES TO CONSIDER:

How a House Is Built
From the architect’s plans to the landscaping.
Hardcover • 0-8234-0841-8
Paperback • 0-8234-1232-6

Tool Book
Basic tools and how they are used to make things.
Hardcover • 0-8234-0444-7
Paperback • 0-8234-0694-6
The Life Cycle of a Butterfly: Many Pastabilities

Select one of the pasta shapes and glue it in the box that best represents the life cycle of the butterfly.
Draw and color additional scenery in each box.

Note to Teacher: Provide the following materials
- Spiral pasta
- Shell pasta
- Bow tie pasta
- Small pasta
- Crayons or markers
- Glue
Sea Turtles
by Gail Gibbons

ABOUT THE BOOK
Large sea turtles lived about 200 million years ago, when dinosaurs were still alive. Today they are smaller and are found in warm ocean water around the world. Here is information about the eight kinds of sea turtles, their physical characteristics and senses, how they feed, migrate, and nest, and what is being done to protect them. Included is a list of curious facts and how a turtle differs from a sea turtle.

LESSON IDEAS

Sea Turtles: An Endangered Species
All sea turtles are protected by the Endangered Species Act, which lists all species as endangered except the loggerhead, which is listed as threatened. Discuss this with the class. Ask them why they think sea turtles might be endangered. List all possible reasons on chart paper. Then have students research the actual reasons (overexploitation, habitat loss, illegal fishing, pollution). Discuss each one in detail and ask students what they can do to help. Share one success story brought about by an organization called HEART (Help Endangered Animals—Ridley Turtles). Their website is http://www.ridleyturtles.org/. You can learn more and find suggestions on how to springboard your own campaign.

Sea Turtle, Turtle, and Tortoise
Draw a three-circle Venn diagram on large chart paper, as well as on 8½”x-11” paper to photocopy and distribute to students. Label the circles “Sea Turtle,” “Turtle,” and “Tortoise” respectively. Use the pages entitled “The Difference Between a Sea Turtle and a Turtle” to begin filling in the circles. Do this together as a class. Then have students look for more differences/similarities not only between sea turtles and turtles, but include tortoises as well. The school librarian might be most useful in assisting students in this task. Discuss findings together as a class.

Paper Plate Turtle
Have students make sea turtles from two paper plates and construction paper. First paint the plates green and let them dry. Once they are dry staple or glue the plates together to form the shell of the turtle. Cut out pieces of lighter green construction paper to make the head and flippers. Students can add eyes, mouth, and shell design with markers. As an extension, students can research one of the eight types of sea turtles, labeling their paper plate sea turtle as such. Then they should write five facts about the type of turtle on lined paper. Display the sea turtles and fact sheets throughout the classroom.

OTHER TITLES TO CONSIDER:

Whales
Information about the world’s largest animals.
Hardcover • 0-8234-0900-7
Paperback • 0-8234-1030-7

Sharks
Their physical characteristics, behavior, and habitats of different kinds.
Hardcover • 0-8234-0960-0
Paperback • 0-8234-1068-4
Is a Herpetologist for You?

A herpetologist is a person who studies reptiles and amphibians. First discuss the differences between reptiles and amphibians. Begin by showing pictures of the following animals: snake, turtle, crocodile, toad, salamander, and frog. Ask the class which are reptiles and which are amphibians. Write the names in the chart shown below. Further explore the similarities and differences to complete the chart.

When finished, ask the class whether or not they’d like to be herpetologists. Do they think the job is interesting? Is it dangerous? Is it a job that helps other people? Have them write their responses by completing the sentence:

I would/wouldn’t like to be a herpetologist because ____________________________

____________________________

____________________________

_________ ____________

<table>
<thead>
<tr>
<th>EXAMPLES</th>
<th>REPTILES</th>
<th>AMPHIBIANS</th>
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<tbody>
<tr>
<td>SIMILARITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIFFERENCES</td>
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Educator’s Instructions
August

Frogs
by Gail Gibbons

ABOUT THE BOOK
There are more than 3,800 different kinds of frogs. The information presented here includes how their bodies change as they grow from tadpoles into frogs, how they make sounds that can mean different things, how they hibernate when it’s cold, and how they differ from toads. These amphibians, which can usually jump ten times their body length, play an important role in the balance of nature.

LESSON IDEAS

What Do You Really Know About Frogs?
Ask students to draw and color a frog. Most students will color the frog green. Discuss the fact that there are more than 3,800 different kinds of frogs, and not all of them are green. A good example of such is the poison dart frog from the rain forest of South America, which is very colorful. Have students select a type of frog to research. The school librarian will be most useful in this task. Students must write at least five things about the frog they’ve chosen. They should draw a picture of it or print out one from the Internet. Create lily pads for a bulletin board entitled “Fascinating Frog Facts” and attach each project to a pad.

Paper Frog Puppet
Have students make a frog puppet from a brown paper bag. You’ll need bags, glue, construction paper, scissors, markers/crayons, and googly eyes. Turn a brown paper bag upside down so the base becomes the head of the puppet. First make the bulging frog eyes by cutting two strips of green paper that are rounded on one end. Fold the straight ends under and glue on the googly eyes. Then glue the folded base of the eyes onto the paper bag. Cut a long tongue out of red or pink paper. Glue it in the frog’s mouth. Then cut two short legs and two long legs and attach them to the bag on either side. Finally, decorate the frog with green paper patches.

Jumping Contest
Frogs are wonderful jumpers. They can jump ten times their body length. Hold a jumping contest with the students. First have students work in pairs to measure their own body length and record it on a chart. Then have students take turns jumping to see how far they can jump. Can they jump ten times their own body length? This is a good physical activity that also builds math skills. Record all findings on a chart and examine it as a class.

Save the Frogs
Some species of frogs are becoming extinct. Some experts believe that the decline in the world’s frog population is an early warning sign about the environment. Inform the class that in 1995 it was noted that an unusually high number of frogs had extreme malformations (e.g., unusual webbing, extra limbs, missing legs and eyes). Some scientists suggested that the abnormalities were due to increased exposure to ultraviolet light, chemical contamination, and parasites. Discuss this concept with the class. Brainstorm different things to do to help the frogs, and in turn help the environment. Have students create “Save the Frogs” posters to display around the school.

OTHER TITLES TO CONSIDER:

Deserts
Their characteristics and how plants, animals, and people live in them.
Hardcover • 0-8234-1276-8
Paperback • 0-8234-1519-8

Trains
Passenger and freight trains are useful, and fun to watch.
Hardcover • 0-8234-0640-7
Paperback • 0-8234-0699-7
“Croak, Croak, Croak,” Says the Frog
Complete the work sheet below and you’ll croak with delight!

1. Frogs are ______________________. They are cold-blooded creatures.

2. An interesting fact about frogs is:

3. These are some of the enemies of frogs:

4. Frogs are in trouble because:

5. How can we help frogs?

6. Draw and label the life cycle of a frog.
McIntosh Golden Delicious
Granny Smith Red Delicious
Apples by Gail Gibbons
Educator’s Instructions September

ABOUT THE BOOK

Apple trees grow in more parts of the world than any other fruit tree. They have been in existence for about two million years.

From blossom to pollination to picking, here is information about how they grow, their various parts, and the different varieties. Instructions on how to plant and care for an apple tree are included.

Juice, jelly, cider, pie, or right off the tree . . . apples are delicious.

LESSON IDEAS

Phonemic Awareness & Sound Study: A Is for Apple

Phonemic awareness is critical to reading, spelling, and writing. To help children gain practice hearing the actual sound that the letter A makes, say various A words out loud, as well as words that have the short A sound within the word itself (e.g., bat). The students should clap when they hear the ah sound. Show students various A-word pictures (e.g., airplane, ant, alligator, anchovy, angel) and have them identify the object. Ask if the object begins with the letter A. Then as a class, brainstorm words beginning with A. Write them on chart paper and keep the charts displayed in the classroom for the duration of the unit. As an extension activity, have students work with their caregiver to create a collage of all things beginning with A. Students can share their collages with the rest of the class.

Taste Test

Slice up samples of each of the four different apple types listed below and give each student a piece of each. Conduct a taste test. Students should record their findings.

<table>
<thead>
<tr>
<th>McIntosh</th>
<th>Golden Delicious</th>
</tr>
</thead>
<tbody>
<tr>
<td>☺ sweet ☞ tart</td>
<td>☺ sweet ☞ tart</td>
</tr>
<tr>
<td>Crispy</td>
<td>Crispy</td>
</tr>
<tr>
<td>Soft</td>
<td>Soft</td>
</tr>
<tr>
<td>Granny Smith</td>
<td>Red Delicious</td>
</tr>
<tr>
<td>☺ sweet ☞ tart</td>
<td>☺ sweet ☞ tart</td>
</tr>
<tr>
<td>Crispy</td>
<td>Crispy</td>
</tr>
<tr>
<td>Soft</td>
<td>Soft</td>
</tr>
</tbody>
</table>

Apple Painting

As a fun art activity, have students create apple paintings by cutting various apples in half and dipping the pieces into different colored tempera paint. Press the apples onto art paper. Once dry, hang the students’ masterpieces around the classroom.

Parts of an Apple

Draw an outline of the interior of an apple. Photocopy the paper and distribute one to each student. Divide the class into groups and give each group a cut-open apple. Discuss the parts of an apple (stem, skin, flesh, core, seeds, seed chambers). Then have students label and color each apple part on the corresponding handout.

OTHER TITLES TO CONSIDER:

Spiders
The physical characteristics, behavior, and habitats of different kinds of these creepy crawlies!
Hardcover • 0-8234-1006-4
Paperback • 0-8234-1081-1

Marshes & Swamps
How they differ, and the kinds of animal and plant life found in them.
Hardcover • 0-8234-1347-0
Paperback • 0-8234-1515-5

HOLIDAY HOUSE
WWW.HOLIDAYHOUSE.COM
The Apple Season

After reading *Apples* by Gail Gibbons, think about the life cycle of the apple tree, from the planting of seeds or seedling and pollination of the apple blossom to the dormant tree in winter. Draw the same apple tree in each of the four seasons in the boxes below.

<table>
<thead>
<tr>
<th>In the springtime, flowers called apple blossoms begin to bloom.</th>
<th>Throughout the warm summer the little apples grow.</th>
</tr>
</thead>
<tbody>
<tr>
<td>During early fall the apples ripen. Soon it will be harvest time.</td>
<td>In winter, the apple tree branches become bare.</td>
</tr>
</tbody>
</table>
The Pumpkin Book
by Gail Gibbons

ABOUT THE BOOK
Big, small, round, tall—pumpkins come in all shapes and sizes. Here one learns the marvels of the growth cycle of these incredible plants—from flat seeds, to thick vines covered in golden flowers, to brilliant orange pumpkins! Gail Gibbons also relates the special role pumpkins played in the first Thanksgiving. Simple and clear directions for drying seeds, planting and tending pumpkin patches, and carving funny or scary faces are included in the book along with a fascinating section on pumpkin facts and lore.

LESSON IDEAS

P Is for Pumpkin and What Else?
Here is a fun way for children to study the letter P. Begin by pulling various items out of a bag. All the items should begin with the letter P (e.g., pear, penny). Ask students what all the items have in common. Once it is determined that they begin with P, hold a classroom contest, whereby students need to draw as many P words as they can. When the time is up, have students share with the rest of the class. Award a first-, second-, and third-place winner. Then have children return to their seats to label each of their drawings of P words. This is good for phonics and spelling practice.

Estimate Weight
Bring a pumpkin to class. Hold a class discussion about weight, asking various students to share their weight. Allow students to lift the pumpkin, giving them a point of reference in relation to their own weight. Ask students if they think they weigh as much as the pumpkin. Have each student take a guess as to the exact weight of the pumpkin. Weigh it to see who was closest.

The Many Faces of Jack-o’-Lantern
Demonstrate how to carve a pumpkin into a jack-o’-lantern in front of the whole class. Prior to cutting, discuss the various facial expressions and shapes involved in making a jack-o’-lantern (e.g., angry face with triangles for eyes). As a class, vote on the kind of jack-o’-lantern to create. As a follow-up, have each student create his or her own paper jack-o’-lantern. Distribute orange and black construction paper. Have students cut the orange paper into a pumpkin shape. Then have children cut the black paper into different shapes to use as eyes, mouth, etc. Have students name their masterpiece to include its mood (e.g., Happy Jack-o’-Lantern).

Seed Count
Prior to carving the jack-o’-lantern, ask students to guess how many seeds they think are inside the pumpkin. Write the various guesses on the chalkboard. Divide the class into groups. After the pumpkin is carved, distribute the seeds to the groups. Have each group count the pumpkin seeds into piles consisting of ten seeds per pile. Once completed, as a whole class, count by tens the number of seeds in the pumpkin. Introduce students to counting using tally marks for the leftover single seeds. See how close the class was with its estimation. As a cumulating activity, toast and eat the seeds!

OTHER TITLES TO CONSIDER:

Halloween Is . . .
A celebration that includes all kinds of spooky fun!
Hardcover • 0-8234-1758-1
Paperback • 0-8234-1797-2

Bats
Their amazing abilities and how they fit into the natural world.
Hardcover • 0-8234-1457-4
Paperback • 0-8234-1637-2
Pumpkin Data Sheet

No two pumpkins are alike. Use this worksheet to collect data about your pumpkin. Write your guesses in the first column and the actual measurements in the second column. See how close you are.

<table>
<thead>
<tr>
<th>Estimated Measurements</th>
<th>Actual Measurements</th>
</tr>
</thead>
</table>

1. How tall is the pumpkin?

2. How big around (circumference)?

3. What is the weight?

4. How many lines on the outside?

5. How many seeds?

Describe the texture and color:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Thanksgiving Is . . .
by Gail Gibbons

ABOUT THE BOOK
Thanksgiving is turkey, cranberry sauce, and pumpkin pie. It is parades with giant balloons. It is a holiday for remembering the Pilgrims and the Indians they met. Most of all, it is a time to share with family and friends and a time to give thanks for many blessings.

LESSON IDEAS

Thanksgiving Is . . .
Read Thanksgiving Is . . . aloud and hold a class discussion about all the things that Thanksgiving represents. Use the page headers as a guide to the discussion (harvest celebrations, Pilgrims, Native Americans, etc.). Keep a list of things discussed on chart paper. Then create turkey necks and heads. Also create feather patterns from oaktag. Distribute the turkey parts and have the students trace the feathers onto different-colored construction paper (red, yellow, orange). Glue a small paper plate on a piece of black construction paper, attaching the feathers, neck, and head to it in the shape of a turkey. Write “Thanksgiving Is” on the paper plate and have students write the various things the holiday represents in the turkey feathers. Display the turkeys around the classroom or on a bulletin board.

Letter of Thanks
Have the children write a letter to someone in the school (principal, secretary, custodian, etc.) expressing thanks for things done for the class or school. First discuss the elements of a letter and what makes a good letter. Brainstorm different ideas to write about. Students should illustrate the letters and place them in a large folder made of construction paper. Deliver the letters to the respective person.

Thanksgiving Comparison
Show the class pictures of the first Thanksgiving feast and of Thanksgiving dinner gatherings of today. Discuss the differences. Among the things to be compared are how the food is prepared, what kind of clothing the people are wearing, what kind of food is being served, who is invited to dinner. Make a class comparison chart and keep it displayed in the room.

Corn Kernel Counting
Incorporate corn into this math estimation lesson. Fill a glass or clear plastic jar with corn kernels. (It’s more fun if you can find Indian corn kernels.) Ask the children to estimate how many corn kernels are in the jar. Write down their estimations. Divide the class into groups of three. Distribute small sorting cups to each group, along with a scoop of kernels. Each group should count ten kernels into each cup and then “count by ten” to determine the number of kernels they were given. Come back together as a whole group and calculate the total number of kernels to see who came closest to the number in the jar.

OTHER TITLES TO CONSIDER:

Owls
From egg to owlet to fierce bird of prey, this book offers an insightful look at these impressive creatures of the night.
Hardcover • 0-8234-1880-4

Wolves
Just how do these long-feared animals live?
Hardcover • 0-8234-1127-3
Paperback • 0-8234-1202-4
I Am Thankful

Draw and describe all the things for which you are thankful (family, friends, etc.).

I am thankful for


The Planets
Revised Edition
by Gail Gibbons

ABOUT THE BOOK

Since The Planets was first published in 1993, space exploration has resulted in many new discoveries. There has been the 2004 Mars Exploration Rover Mission, the discovery of additional moons orbiting Jupiter, the discovery that the rings around Saturn are made of ice only, and more. For young space enthusiasts, this new edition will continue to be “an inviting gateway to the subject,” which is how School Library Journal described the first edition.

LESSON IDEAS

Nine Planets, Nine Groups: A Research Project

Divide the class into very small groups of two to three students. Each group will research various facts about one of the planets. Each group will be assigned a planet and will rotate between computer, reference materials, library visits, etc. Students should use a variety of sources to obtain information. Two excellent websites that give students a multimedia tour of the solar system are www.kidsastronomy.com and www.seds.org/billa/tnp. Students will give a presentation to the rest of the class about their planet, which should include visuals as well as several key characteristics of the planet (e.g., Venus’s atmosphere consists of hot, swirling clouds of carbon dioxide and is often called the evening star).

Postcards from Space

Children often wish they could travel into space. Here is a fun way to promote space travel. Have students create travel brochures and postcards from any planet they so choose. The travel brochure must include items such as climate, key attractions, etc. Bring in actual travel brochures and postcards as models and discuss the types of information that should be included. Be creative and imaginative.

M, V, E, M, J, S, U, N, P

To help students remember the order of the planets, have them create funny sentences using the letters above. For example, My Very Eager Mother Just Saved Us Nine Pennies. The only requirement is that the sentence must make sense and be grammatically correct. Have fun!

Weightlessness

The concept of weightlessness and the loss of gravity can be a difficult concept. Introduce the topic by blowing up a balloon and drawing an astronaut on it. Enjoy batting the balloon around the classroom with the students. Explain that the “weightless” astronaut is floating in space. Then segue into the topic of gravity. Explain that gravity is the pull toward the center of an object (e.g., planet or moon.) When you weigh yourself, you are measuring the amount of gravitational attraction exerted on you by Earth. The moon has a weaker gravitational attraction than Earth, so you would weigh less on the moon. How much would you weigh on the moon and on the other planets? Have students use the chart below, along with a calculator. Even young children will appreciate this exercise, and it’s a good introduction to calculators and multiplication. Older students may want to practice the calculations without the calculator.

<table>
<thead>
<tr>
<th>PLANET</th>
<th>Multiply Your Earth Weight by:</th>
<th>Your New Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>.4</td>
<td></td>
</tr>
<tr>
<td>Venus</td>
<td>.9</td>
<td></td>
</tr>
<tr>
<td>Moon</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td>Mars</td>
<td>.4</td>
<td></td>
</tr>
<tr>
<td>Jupiter</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>Saturn</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Uranus</td>
<td>.8</td>
<td></td>
</tr>
<tr>
<td>Neptune</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Pluto</td>
<td>.01</td>
<td></td>
</tr>
</tbody>
</table>

OTHER TITLES TO CONSIDER:

Stargazers
Basic information about stars and constellations.
Hardcover • 0-8234-0983-X
Paperback • 0-8234-1507-4

Christmas Is...
It is many things, including peace, love, and joy.
Hardcover • 0-8234-1582-1
Paperback • 0-8234-1767-0
Reproducible Activity

Name___________________________       Date___________________________

The Nine Planets

Use *The Planets* by Gail Gibbons, as well as other resources, to complete the chart below.

<table>
<thead>
<tr>
<th>Planet</th>
<th>One Rotation</th>
<th>One Year</th>
<th>Distance from Sun</th>
<th>How Many Moons?</th>
<th>How Many Rings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mars</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jupiter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturn</td>
<td></td>
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</tr>
<tr>
<td>Uranus</td>
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<tr>
<td>Neptune</td>
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<tr>
<td>Pluto</td>
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</tbody>
</table>