The Cat in the Hat's Learning Library



EDUCATORS' GUIDE





Fun Nonfiction from Dr. Seuss!

Dear Teacher.

Are you ready to laugh while you learn? Dr. Seuss books aren't just zany fun ... they're also full of super cool and true facts! Step into the Cat in the Hat's Learning Library and discover the world around you. Extend your learning with this activity brochure and explorer's journal that are funner than fun!

From the vast expanse of outer space to the tiniest creepy-crawly—there's no limit to the things you can discover. Join the Cat in the Hat, Thing 1, and Thing 2 on exciting adventures as you learn about your environment through engaging rhymes and fascinating facts.

Learn to read and read to learn with the Cat in the Hat's Learning Library!

Your friends. Dr. Seuss Enterprises and Random House Children's Books

Praise for the Cat in the Hat's Learning Library™

"The familiar format and entertaining text are sure to appeal to beginning readers."

-School Library Journal





The 100 Hats of the Cat in the Hat: A Celebration of the Hundredth Day of School



About the book: The hundredth day of school is always a time of celebration. When the Cat in the Hat visits school as a guest on the hundredth day, he teaches Sally, Dick, and their classmates how to count to 100, skip count by fives and tens, add and subtract using ten frames and number lines, and multiply and divide in groups of 2, 5, 10, and 25. A glossary, index, and activities for further learning conclude this fun and engaging exploration of math by celebrating 100 days of school.

Objective: Students will learn how to add, subtract, skip count, multiply, and divide within the context of celebrating the hundredth day of school.

Materials: Paper or plastic cups, cereal, candy kisses, sticky notes, dice, water, food coloring, paper, crayons, assorted items to count

Activity and Directions:

The hundredth day of school occurs once a year, so celebrate with students by engaging them in a variety of activities:

- 1. Provide 100 plastic or paper cups and have students build a structure. A variation would be to write the numbers 1 to 100 on the cups and have students build a tower putting the cups in number order.
- 2. Engage students in a candy kisses scavenger hunt. Write the numbers 1 to 100 on small sticky dots, and stick a dot on the bottom of each candy kiss. Hide the kisses around the room and have groups of students find ten kisses each to fill their ten-frame. After the groups complete their ten-frame, they match the numbers on the bottom of the kisses to the hundreds chart.
- 3. As a class, create a list of 100 ways to be kind to others.
- 4. Hand out sticky notes and have students write down one thing they have learned this year. Make a chart of "100 Things We Have Learned in School" and post the 100 sticky notes on it.
- Generate a list of ways to move such as 10 jumping jacks, 10 hops, 10 sit-ups, 10 push-ups, 10 turns in a circle, 10 skips, 10 seconds running in place, 10 bending to touch toes, 10 steps walking backward, and 10 stretches on tiptoes.
- 6. Invite children to count 100 items such as paper clips, cotton swabs, pennies, rubber bands, or other inexpensive items found at home or in the classroom. The items can also be divided into groups of five or ten for skip counting.
- 7. Roll the dice to move spaces on a hundreds chart. The first player to get to 100 wins!
- 8. Using water with a drop of food coloring, ask students to draw their prediction of how much 100 drops of water will fill a glass. Once the water has been added using an eye dropper, students can then draw the actual amount.
- 9. Locate a template for a crown on the internet. Have students color the the crown, cut it out, and write the words "I am 100 days smarter."





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00 Pennies

Draw a picture of what you will look like when you are 100 years old. Next, finish the sentence: "When I am 100 years old I will ..."

When I Am 100 Years Old

When I am 100 years old I will _____



Happy Pi Day to You! All About Measuring Circles



About the Book: Did you know that March 14 is known as Pi Day? That's because 3.14 (third month, fourteenth day) is the ratio of a circle's circumference to its diameter. The Cat in the Hat shows Dick and Sally how to draw a circle with a string and a stick to explain the terms circumference, diameter, and radius. The clever cat also engages kids in a Pi-Toss Game to help them understand Pi and introduces them to some Pi pioneers. So put on your Pi hat and have some measuring fun! A glossary of terms is included along with Pi Day resources to celebrate this unique holiday.

Objectives: Students will learn about the origins of Pi, how to draw and measure circles, and discover the names of the early Pi pioneers such as Isaac Newton and Ada Lovelace.

Materials: Construction paper of ten different colors cut into strips, stapler, tape, or glue

Activity and Directions

Pi Paper Chain

- 1. Cut the construction paper into strips approximately one-and-a-half inches by eleven inches.
- 2. Determine which color will represent which number. For example, the red construction paper strip could be 1, blue for 2, green for 3, and so on until zero through nine are all assigned a color.
- 3. Begin the paper chain by taking the strip in the color chosen to represent the number 3. Make a loop with that strip and close it with a stapler, tape, or glue.
- 4. Next, the strip that represents the number 1 should be threaded through the loop just created. Close the loop.
- 5. Take the strip for the number 4, loop it through the "1" chain link, and close it. The first three Pi numbers, 3.14, have started the paper chain.
- 6. Continue looping the correct colors through each loop to form a Pi paper chain. Decide how long you want the chain to be. It can be as short or as long as time and interest allow. One of the longest Pi paper chains was made by students in Connecticut and contained 65,000 paper strips. Here are the first 500 decimal places to keep you going:

3.141592653589793238462643383279502884197169399375105820 97494459230781640628620899862803482534211706798214808651 32823066470938446095505822317253594081284811174502841027 01938521105559644622948954930381964428810975665933446128 47564823378678316527120190914564856692346034861045432664 82133936072602491412737245870066063155881748815209209628 29254091715364367892590360011330530548820466521384146951 94151160943305727036575959195309218611738193261179310511 85480744623799627495673518857527248912279381830119491



Circle Scavenger Hunt

Have students locate these items in the classroom or at home. Color the items that are found. Students can draw a picture of other circles in the empty squares they find.

Older students able to divide numbers can measure the circumference and diameter of each object using a string and ruler. Students can divide the circumference by the diameter to discover that it is close to 3.14 each time.

		Circumference	Diameter	Answer
O O O O O O Button	11 12 1 11 12 1 10 2 9 • 3 			
Cookie	yo-yo			
Eye glasses	Plate			



My, Oh My—a Butterfly! All About Butterflies



About the Book: What's the little round dot on that leaf? Could it be an egg that will hatch into a caterpillar? That caterpillar then eats leaves and grows and grows until eventually it is too big for its own skin. Soon the caterpillar forms a shell called a chrysalis and ten days later, it emerges as a butterfly. The Cat in the Hat shares all sorts of fun facts with Sally and Dick about butterflies: They drink nectar from flowers using a tube called a proboscis, they see thousands of images at once, and their names are often based on their size, shape, and color. Join the Cat in the Hat in this fun new hobby called butterflying!

Objective: Students will learn about various kinds of butterflies and moths as well as the journey of the monarch butterfly. Static electricity will also be part of the learning experience to incorporate science into the activity.

Materials: balloon, pencil, scissors, thick paper (like cardstock), tissue paper, glue stick, cardboard, googly eyes for the butterfly

Activity and Directions:

Static Electricity Butterfly

A fun activity from Liberty Science Center (<u>tinyurl.com/y8ps9juu</u>) uses static electricity to make a paper butterfly flap its wings.

- 1. Cut a square from the cardboard. A good size is 7 inches x 7 inches.
- 2. Using a pencil, draw butterfly wings on the tissue paper. Don't press too hard because the tissue paper will tear. Make sure the wings are smaller than the cardboard square.
- 3. Cut out the wings using scissors and set them on the cardboard (do NOT glue them).
- 4. Draw and cut a butterfly body out of the thick paper and glue it between the butterfly wings. The butterfly body should extend above and below the wings. And remember not to glue the wings down. They should be loose.
- 5. Decorate the butterfly wings, glue the googly eyes on the body, and add antennae. When drawing on the wings, be careful not to rip the tissue paper.
- 6. Blow up the balloon.
- 7. Rub the balloon back and forth on your hair to give it an electric charge.
- 8. Once the balloon is charged, hold it over the top of the butterfly so it is close but not touching. Watch the wings rise and fall as the balloon is moved closer and farther away. Rub the balloon on your hair again if it needs to be recharged.





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Life Cycle of a Butterfly—Cut and Paste

Cut and paste the sentences below in order in the label boxes to show the life cycle of a butterfly. Then draw pictures to illustrate each part of the cycle.



Great Day for Pup: All About Wild Babies





About the Book: Travel the world with the Cat in the Hat! Once Sally and Dick climb aboard, they are whisked away to Australia to meet Ma Kangaroo and her joey. There are also ostrich parents and a mother croc. Soon it's off to Asia to view baby pandas, tiger cubs, and elephant calves. In Africa, the trio is greeted by a troop of gorillas, a mother giraffe, and zebra colts. But wait! The journey is not complete. A visit to a cold place offers sightings of penguin chicks that want to cuddle and eat and polar bear cubs that like to romp, tumble, and slide. It is a great day for Sally and Dick and all the wild babies they meet.

Objective: Students will demonstrate their knowledge about the names of baby animals and how they move.

Materials: white cardstock, scissors, glue

Activity and Directions:

Verb Accordion Book

- 1. Revisit A Great Day for Pup: All About Wild Babies and identify different ways baby animals and their parents move.
- 2. Write down the animal and the verb. The action verbs can be found in the text. For example, "Chicks march." The verb may also be suggested by the illustration, like when Joey jumps.
- 3. Cut a piece of white cardstock in half lengthwise so you have two long rectangles.
- 4. Fold one of the rectangles in half widthwise.
- 5. Fold into an accordion.
- 6. Flip the cardstock over and do the same to the other side. The cardstock now resembles a W.
- 7. Fold the second rectangle the same way.
- 8 Glue the ends of the Ws together to make a long accordion.
- 9. On the cover, write "How animals move!" and draw a picture of your favorite animal.
- 10. Write a brief sentence on each page of the accordion book, both front and back, and draw a picture.



Whose Baby Is This?

Is there anything cuter than a baby animal? Some young animals have the same name as their parent, while other babies have a special name. Read the animal name on the left and draw line to match it to the name of its baby on the right.

kangaroo	calf
ostrich	cub
panda	chick
tiger	joey
elephant	pup
giraffe	chick
zebra	cub
penguin	colt
polar bear	calf
sea lion	cub





kangaroo—joey, ostrich—chick, polar bear—cub, sea lion—pup zebra—colt, penguin—chick, polar bear—cub, sea lion—pup

Oh Say Can You Seed? All About Flowering Plants



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About the Book: Did you know that every flowering plant started as a seed? The Cat in the Hat shares information with Sally and Dick about the parts of seeds and plants, tells the twosome about the purpose of roots, and offers the curious duo an explanation of photosynthesis—how plants make their own food. Thing One and Thing Two also show us how bees pollinate plants so they can grow. *Oh Say Can You Seed?* includes terms such as fertilization, oxygen, nectar, and plant to help readers increase their vocabulary and background knowledge about plants.

Objective: Students will learn about the parts of a plant, how seeds grow, what plants need to make their own food, and the various kinds of plant food.

Materials: plastic cups, soil, grass seeds, construction paper, water, scissors, glue or tape, notebook, pencils

Activity and Directions:

Growing Grass

- 1. Cut out a nose, mouth, and eyes from colored construction paper and glue them to the front of the cups. The grass will eventually resemble hair.
- 2. Fill each plastic cup three-quarters full with soil.
- 3. Sprinkle enough grass seeds to cover the soil. Do not cover the seeds with soil.
- 4. Place cups in a sunny location inside the classroom.
 - 5. Water the grass seeds at the beginning and end of the school day. You can experiment with how much water is ideal for grass as a class.
 - 6. Record the growth of the seeds each day in a notebook. Generally, grass seeds take about seven to ten days to begin growing.
 - 7. Trim the grass hair with scissors so each plastic cup head is unique.



Oh Say, Can You Name the Parts of a Plant?

Label the parts of a plant.



I Can Name 50 Trees Today! All About Trees









About the Book: Tag along with the Cat in the Hat, Dick, and Sally to learn the names and characteristics of fifty trees. Did you know the roots of a wild fig can grow nearly 400 feet deep? Or that the bark of the redwood is two feet thick to protect it from fire? The eucalyptus tree found in Australia and can grow to be 492 feet tall! The Cat in the Hat shares information about how tree roots draw water and minerals from the ground while leaves make the oxygen we need to survive. This tree-mendous exploration of different tree species will encourage readers to branch out and learn more!

Objective: Students will learn about the different parts of a tree and the purpose of each, various species, and interesting facts about trees located around the world.

Materials: Thin or lightweight white paper (such as copy/printer paper), crayons, colored pencils or pastels, and fresh-cut leaves

Activity and Directions: Leaf Rubbing

- 1. Collect a variety of tree leaves.
- 2. Peel paper off the crayons (colored pencils or pastels can also be used).
- 3. Place the leaf on a table or flat surface, textured side (veins) up.
- 4. Put a piece of thin or lightweight paper on top of the leaf.
- 5. Hold a crayon sideways and rub it gently over the area where the paper is covering the leaf. As you do this, the colored areas begin to take the shape of the leaf.
- 6. Add to the rubbing using a new leaf under the paper next to the first leaf rubbing. Choose a different color crayon and rub it sideways just like the first leaf rubbing.
- 7. Continue until the entire page is filled with different leaf rubbings.
- 8. Color the spaces between the leaves to make them stand out. Or overlap the rubbings to create a unique piece of artwork.

I Can Answer Twelve Questions About Trees!

Fill in the blanks using the word bank. The Cat in the Hat has the answers, so return to the book if you are stumped.

rings	two trunk		plant	
warm			oxygen	
4700	bark spores		roots	
crown			400	
A tree is a				
The stem of a tree is called a				
Branches and leaves are called the _				
			hold th	ne tree up.
The wild fig has roots that can be				feet deep
Leaves mix water with sunrays and c	arbon diox	ide to		
produce				
The	of a tre	e is like th	e skin on	your body.
The bark of the redwood is				_ feet thick.
Count the		_ to discov	ver the ag	e of a tree.
The bristlecone pine can live to be _				years old.
Palm trees grow where it is				
The tree fern has			instead	of seeds.
The tree fern has			instead	of seeds.

Would You Rather Be a Pollywog? All About Pond Life







About the Book: Sally and Dick join the Cat in the Hat to visit a body of water called a pond. There they observe and learn about tiny algae plants, freshwater snails, slippery leeches, insects such as the water strider, and lots of fish including sunfish, bullhead, and crappie. The twosome observes adorable ducklings swimming behind their mother, frogs sitting on logs, six pollywogs, amphibians like the cute newt, and turtles basking in the sun. Come along and discover pond life!

Objective: Students will obtain information about a pond's ecosystem. Students will learn to fold an origami frog.

Materials: Origami paper or thin printer paper (6 x 6-inch square),

Activity and Directions Origami Jumping Frog

Assist children in making a frog that could jump right out of the pond by following the steps below. If visual directions would be helpful, here is a video: <u>youtube.com</u>/<u>watch?v=rht7y5kooJQ</u>

- 1. If using origami paper, be sure that the color side is facing up.
- 2. Fold the paper in half from the right edge to the left edge.
- 3. Fold the top right corner diagonally down to align with the left edge.
- 4. Unfold the previous step.
- 5. Fold the top left corner diagonally down to align with the right edge.
- 6. Unfold the previous step.
- 7. Pinch the sides together by bringing the top left and right edges forward and down so it forms a triangle.
- 8. Take the right corner of the triangle and fold it at an angle to form one of the frog's legs.
- 9. Take the left corner of the triangle and do the same. Be sure to press down on the crease.
- 10. Fold the bottom edge up to meet the bottom of the triangular section.
- 11. Take the right side of the rectangle and fold it to the middle.
- 12. Do the same on the left side—fold it to the middle.
- 13. Take the bottom edge and fold it up to align with the bottom of the triangle.
- 14. Fold the top left and right corners of the lower flap diagonally inward and down.
- 15. Unfold the last two steps so that it looks like a boat.
- 16. Fold the right and left lower points downward.
- 17. To make the frog's back legs, fold the points diagonally outward. Fold the left and right corners of the top triangular section diagonally up.
- 18. Fold the bottom of the frog up along the center.
- 19. Fold the edge back down so the frog can "jump."
- 20. Turn it over and use your finger to hold the back edge down. When you release, the frog will jump away.
- 21. Add eyes using the markers. Then have a frog jumping contest!



The Pond Ecosystem

An ecosystem contains living organisms such as plants, animals, and insects. These organisms interact with the physical environment. A pond is an ecosystem because all the elements work together to maintain a balanced environment.

Using the picture, draw or write which plants, fish, insects, birds, etc. might be found by the shore, on the pond's surface, in the water, and above the pond. Be sure to keep *Would You Rather Be a Pollywog?* nearby to help add to your drawing.



Is a Camel a Mammal? All About Mammals



About the Book: Is a camel a mammal? Yes! All mammals breathe air, are warm to the touch, and grow hair. What are some other mammals? There are kittens and lambs, elephants and blue whales, kangaroos and wallabies, and many more. Sally and Dick learn about various animals as the Cat in the Hat tells them all the information about mammals he is including in his book. Are YOU a mammal? Read and find out.

Objective: Students will learn facts about mammals and demonstrate their knowledge.

Materials: heavy paper cut into cards measuring 3 inches x 5 inches (like cardstock or index cards), pencils, crayons, scissors

Activity and Directions:

Is That a Fact? Mammal Fact Cards

- 1. Ask students to choose one of the mammals from Is a Camel a Mammal?
- 2. After rereading the page(s) featuring their animal, students should select one or more facts.
- 3. Give each student one or more of the cards.
- 4. Draw and color a picture of the mammal on one half of the card and write the mammal's name. On the other half of the card, write one fact about the mammal.
- 5. Cut the card in half so the picture is on one half and the fact on the other. Cards can be cut in random ways so they have a pattern that needs to be matched.
- 6. Collect the completed cards. Take the halves with the facts and place them in a hat or container. Randomly hand out the halves with the pictures to the students.
- 7. Pull out one of the fact cards from the hat and read it. The student with the picture half should identify it as their fact.
- 8. Cards can also be placed face down in two groups—pictures and facts. Students draw a picture card and attempt to find the fact card.

I Am an Expert!

The Cat in the Hat provided information about a variety of mammals. Select one mammal from the book or one you want to learn more about. Conduct research by rereading *Is a Camel a Mammal?* and other books and sources. Using the I graphic, write down what you know about that mammal and share and compare it with others.



Fine Feathered Friends: All About Birds



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About the Book: "Birds come in all colors, all shapes, and all sizes, and live in a world that is full of surprises!" The Cat in the Hat introduces Dick and Sally to birds, which all have a beak, a tail, and two wings. They are covered in feathers and stand on two legs. So what birds are they? The world's biggest bird is the ostrich, while the smallest is the bee hummingbird, which measures only two-inches long. The spoonbill lives in a marsh and has a bill shaped like a spoon, and the New Zealand kiwi is a bird that doesn't fly. When it's time to migrate south for the winter, wild geese are the flock to beat. There's so much to learn about our fascinating and fine feathered friends in this engaging book that concludes with an index, glossary, and recommendations for learning activites.

Objective: Students will learn about various kinds of birds, create a bird feeder, and conduct observations of birds from their area.

Materials: pinecones, string, bird feed (purchased from a pet store), peanut butter

Activity and Directions:

Pinecone Bird Feeder

- 1. Collect several pinecones.
- 2. Tie a string to the pinecone with a loop to hang from a tree.
- 3. Instruct students to spread peanut butter onto the pinecone. (It does get a bit messy!)
- 4. Roll the peanut butter pinecone in birdseed. Pat the seeds so they stick to the peanut butter.
- 5. Hang the pinecone bird feeder in the school garden or nearby trees.
- 6. Use the reproducible for students to record observations of bird sightings.

ALTERNATIVES TO PINECONES:

- 1. Use an orange that is cut in half. Hollow out the fruit, cut a hole to add string, and use peanut butter to stick on birdseed. Find a good location to hang it.
- 2. This activity requires an adult and a stove. Mix together an envelope of unflavored gelatin with ¼ cup of water. Bring to a simmer while stirring until the gelatin is dissolved. Let the mixture cool and then stir in ¾ cup of birdseed. Place cookie cutters onto wax paper and fill each half full of the mixture. Cut string, tie a knot on the end, and push the knot into the birdseed. Continue filling the cookie cutter with birdseed to cover the string. Dry overnight, remove from the cookie cutter, and hang up. prettyprudent.com /cookie-cutter-bird-feeder/
- 3. For other bird feeder ideas, go to redtedart.com/bird-feeder-crafts/

Observe the Birds!

Using this producible or a notebook, take notes about the birds you observe on the ground, in the air, and in trees. Describe or draw them. Make a tally mark for each and record where you see a bird. At the end of a week, count how many birds you observed and write your total.

Description or Drawing	Tally	Total
On the ground		
In the air		
In the trees		



Inside Your Outside! All About the Human Body



About the Book: Visit the Inside-Your-Outside-Machine with the Cat in the Hat, Sally, and Dick to discover what is inside the human body. Your brain controls all you do. Your skeleton is made of bones, from the top of your head to the tip of your toes. The five senses tell the brain what you hear, see, touch, smell, and taste. You have joints, muscles, lungs, and so much more. A lot is going on every day, all the time, in both inside and outside your body. A glossary is included along with suggested activities for further learning.

Objective: Students learn about the different parts of the human body. They will experiment to see how lungs work and explore the five senses through touch.

Materials: empty plastic water bottle, balloons, scissors, packing tape

Activity and Directions:

- 1. Discuss what lungs do and where they are located in the body.
- 2. Cut an inch off the bottom of the water bottle. (Adults will need to help with this.)
- 3. Push the balloon inside the bottle, holding onto the opening of the balloon.
- 4. Fold the mouth of the balloon over the rim of the bottle. Wrap tape around the top to keep the balloon snug around the bottle opening. No air should be able to escape.
 - 5. Cover the bottom of the bottle with a balloon where the bottom has been cut off.
 - 6. Use packing tape to secure all the edges around the bottom.
 - 7. Pull the bottom balloon to make the inside balloon inflate.

This model shows how one lung would work even though the human body has two lungs. Visit the Connecticut Science Center for text for visual directions: <u>ctsciencecenter.org/blog/science-at-play-make-your</u>-<u>own-lung-model</u>.



Name That Texture

Use the hand template or trace your hand on a sheet of paper. Label each finger with one texture, such as bumpy, stretchy, hard, rough, and soft.

Place small items in a paper bag or box for children to feel such as pasta (bumpy), stretchy (rubber band) bean (hard), sandpaper (rough), and cotton (soft). You will need enough so there is one set per student. Students can glue the item onto the finger with the texture word that matches.



Share This Zany and Brainy Series with Your Curious Students!







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This guide was written by Cyndi Giorgis, a professor of literacy education and children's literature in the Division of Educational Leadership & Innovation in the Mary Lou Fulton Teachers College at Arizona State University. Cyndi has served on several ALA and NCTE Award Committees over the years.

