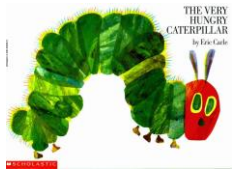


## Bugs Read-Aloud Outline

There is something fascinating about bugs. This time of year, they are difficult to ignore, buzzing and crawling all around us.

Your Read-Aloud could focus on the books of Eric Carle, who has written about caterpillars, crickets, spiders and fireflies, or it could focus on one particular bug, like butterflies. If you choose the latter, combine fiction and nonfiction books or just stick to nonfiction. There are so many book choices available, you could have several different Read-Alouds about bugs.

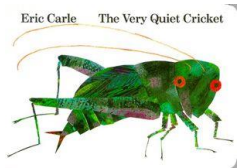
### Fiction books about bugs



#### ***The Very Hungry Caterpillar*** by Eric Carle

Ages 2 and up

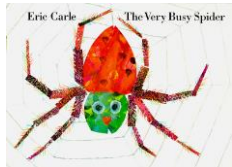
This classic book is colorful with finger holes and pages of graduated sizes. In explaining the metamorphosis of a caterpillar to a butterfly, it also covers days of the week and many fun facts.



#### ***The Very Quiet Cricket*** by Eric Carle

Ages 2 and up

The young cricket tries to make sounds like the other insects. Finally, he discovers he is able to chirp when he see a female cricket! An electronic chirping mechanism is activated by turning the last page. Test the chirp mechanism to be sure it still works.



#### ***The Very Busy Spider*** by Eric Carle

Ages 3 and up

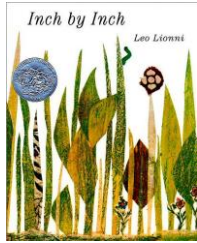
While the other farm animals want to eat or play, the spider is very busy building a web. Page by page, you see and *feel* the web become more intricate.



#### ***The Very Lonely Firefly*** by Eric Carle

Ages 3 and up

The small firefly discovers many other lights in the night before finally finding other fireflies. On the last page, an electronic mechanism lights up several small fireflies. Check your book to make sure it works.



***Inch by Inch*** by Leo Lionni

Ages 3 and up

A small green inchworm is proud of his skill at measuring anything — a robin's tail, a flamingo's neck, a toucan's beak. Then one day a nightingale threatens to eat him if he cannot measure his song. Children will enjoy the clever inchworm's solution and will delight in finding the tiny hero on every page. Every inch the classic, this was the first of Lionni's books to win the Caldecott Honor.

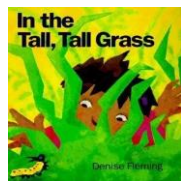
**Nonfiction books about bugs**



***Bugs for Lunch*** by Margery Facklam

Ages 4 and up

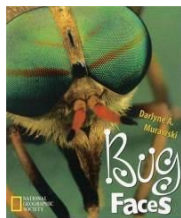
Children learn about insectivorous creatures (creatures that eat insects), presented in simple verse with large illustrations.



***In the Tall, Tall Grass*** by Denise Fleming

Ages 4 and up

Bold colors and 4 to 5 words per page make this book visually appealing. The children will enjoy making the different sounds or different movements as they join various animals moving through the tall grass.



***Bug Faces*** by Darlyne A. Murawski

Ages 3 and up

This book has large, full-page, close-up photos of common insects that appeal to both kids' curiosity and love of the "yuck" factor.

**More nonfiction books**

***A Monarch Butterfly's Life*** by John Himmelman

Ages 4 to 10

***Butterflies and Moths*** by Nic Bishop

Ages 5 to 10

***What's That Bug? Everyday Insects and their Really Cool*** Cousins by Nan Froman and Julian Mulock  
Ages 8 to 12

## Activities

1. Many nursery rhymes and finger plays include bugs. The following website has a comprehensive list of nursery rhymes, including the ones listed below: <http://www.nurseryrhymes.com/>.

- *The Itsy Bitsy Spider*
- *Little Miss Muffet*
- *There Was an Old Lady Who Swallowed a Fly*
- *I'm Taking Home a Baby Bumble Bee*

2. Snack ideas:

- Make "ants on a log" from celery, peanut butter, and raisins.
- Make spider cookies with chocolate sandwich cookies, black string licorice, and tiny M&Ms. Use icing for glue.



3. Compare insects and arachnids (spiders). How are they alike? How are they different?

4. Create a bug to take home. The following website has ideas for bees, butterflies, beetles, and more: <http://www.dltk-kids.com/crafts/insects/crafts.htm>.



5. Go outside, and turn over a log. Lots of bugs like this dark, cool environment. Put a couple bugs in jars, and bring them inside to examine.

6. Run insect races.

- Have 3 kids hold hands and create a 6-legged insect.
- Have 4 kids hold hands and create an 8-legged spider.
- Let the kids pretend they are winged insects by flapping their wings as they run.

7. Purchase roll-up party horns. These resemble the mouth of a butterfly. Turn them upside down, so they roll down like a butterfly proboscis.



8. Play "Crazy Critters." You can either cut and paste your bug, or draw it on paper. Each child needs a sheet of paper. With their first turn, each player rolls a die to see what shape their bug will have. The second roll will determine the face. The third roll is for the antenna, and the fourth roll will decide the type of legs. The following link provides an illustration of how to play: [http://www.expressivemonkey.com/Bug/Crazy\\_Critters.pdf](http://www.expressivemonkey.com/Bug/Crazy_Critters.pdf).

## Dinosaurs Read-Aloud Outline

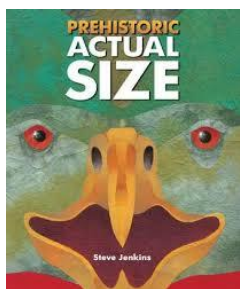
Go wild with dinosaurs at your next Read-Aloud. Kids love these mysterious, fascinating creatures. Choices for great books and activities abound.



### ***Tadpole Rex*** by Kurt Cyrus

Ages 4 to 8

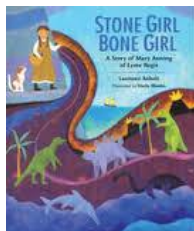
This picture book tells the story of a tadpole with the heart of a dinosaur. Bold pictures and rhyming text make it a great choice for a Read-Aloud. Encourage the kids to act out the story and to search for Rex on each page as he changes from tadpole to frog. Don't forget to read the note on the last page for some interesting prehistoric frog facts.



### ***Prehistoric Actual Size*** by Steve Jenkins

Ages 4 to 10

Jenkins takes exploring dinosaurs to a new level with this engaging picture book. His brief text and striking cut-paper collages depict prehistoric creatures (or parts of the really big ones) in their actual size. Bring tape measures and rulers to this Read-Aloud, and let kids measure out different dinosaurs' actual sizes. Check out the notes at the back for more details.



### ***Stone Girl, Bone Girl: The Story of Mary Anning*** by Laurence Anholt

Ages 6 to 10

A kid makes one of the most important dinosaur finds ever? Sounds like fiction, but it's not! This picture book tells the story of Mary Anning, a young girl who found an ichthyosaur in the chalky cliffs of England, and her sisters, who supported and encouraged her interest in fossils. It's a great book about fossil hunting and is sure to inspire budding paleontologists.

## **More dinosaur books**

### ***How Do Dinosaurs Say Goodnight?*** by Jane Yolen

Ages 3 to 6

### ***Dinosaur Days*** by Linda Manning

Ages 3 to 6

### ***Edwina, the Dinosaur Who Didn't Know She Was Extinct*** by Mo Willems

Ages 5 to 8

***What Did Dinosaurs Eat? And Other Things You Want to Know About Dinosaurs*** by Elizabeth MacLeod  
Ages 5 to 10

***A Dinosaur Named Sue*** by Fay Robinson  
Ages 8 to 12

***Dinosaurs A to Z*** by Don Lessem  
Ages 9 to 12

For more dinosaur books and activities, check out Reading Rockets Reading Adventure Pack on Dinosaurs at <http://www.readingrockets.org/article/32782>.

### **Activities**

1. Fossil rubbings. Paleontologists sometimes make rubbings of things they find – like dinosaur bones! Take paper and unwrapped crayons outside, and have the kids make their own rubbings of leaves, coins, flower petals and other things that they find interesting.
2. Fossil hunt (requires a makeshift sandbox). Bury several "fossils" in the sandbox, and give each child a tool such as a spoon, small shovel or paintbrush to dig for dinosaur bones. Fossils can be rocks, cardboard cut in the shape of bones or clay with mysterious markings.
3. Make your own fossils. Let the kids look outside for natural objects or bring in plastic dinosaur toys and boiled chicken bones. Use Crayola Model Magic (available at craft stores) or mix up a batch of 'clay' using used coffee grounds (See this website for instructions: <http://voices.yahoo.com/how-air-dry-clay-coffee-grounds-1358159.html>). Divide the clay among the children, as well as the fossil-like objects. Have the children make impressions of the items in the clay. Remove the object, let the clay dry, and voila! You have a fossil!
4. T. rex tag. One child is designated as the T. rex. He roars and acts ferocious as the other children run from him. When tagged by the T. rex, kids must stand still until they are freed by one of the other kids crawling between their legs. This game can get pretty wild. You'll want to give more than one child a chance to be the T. rex.
5. Dino Chow. Some of the biggest dinosaurs were plant eaters. Talk with the kids about carnivores, herbivores and omnivores, and how their teeth and bodies differed. Offer the kids some plants to eat – celery, broccoli, carrots, apple slices, etc. – and talk about how the herbivores found their food.
6. Create your own dinosaur. Provide the kids with pipe cleaners in various colors and let them construct their own dinosaurs. Encourage them to add scales, horns, spikes, wings and tails. What name would they give their dinosaurs?
7. Dino Simon Says. Line up the kids to play Simon Says, using carnivorous dinosaur commands such as, "T. rex says ROAR! T. rex says stomp! T. rex says chomp!" Encourage the kids to suggest their own dinosaur commands. Then, to calm the kids

down, try giving commands from a gentle herbivore. "Triceratops says chew. Triceratops says snore."

8. Dino Dinner Chant. This can be a great way to get the wiggles out before the group sits down to read. Practice saying the chant together, or do it as a repeat-after-me. Clap hands on thighs to keep a steady beat.

Allosaurus!  
Stegosaurus!  
Apatosaurus too!  
They all went out to dinner  
At the dinosaur zoo.  
Along came a waiter called  
Tyrannosaurus Rex  
He gobbled up their table  
'Cause they wouldn't pay their checks!  
They wouldn't pay their checks!

For a variation, use different dinosaur names or invent motions for the kids to act out.

### Conversation Starters

1. What's in a name? Dinosaur names describe body features, behaviors or even the scientists who discovered their fossils. The word "dinosaur" comes from the Greek *deinos* (terrible, powerful) and *sauros* (lizard). Get the kids talking about their favorite dinosaurs and what their names mean. Check out [www.DinoDictionary.com](http://www.DinoDictionary.com) for the meanings of names and their pronunciation or look them up in one of the books you brought.
2. What do the kids already know about dinosaurs? What happened to them? Have they seen any dinosaur movies? Has anyone been to the Smithsonian and seen the dinosaur skeletons in the Natural History Museum?
3. Talk about the work of paleontologists. What do they do? How do they look for fossils, and what do they do with them when they're found? To get the discussion going, tell the kids about Mary Anning, an English girl who discovered an Ichthyosaur fossil when she was 12 (see *Stone Girl*, *Bone Girl* in the book list).

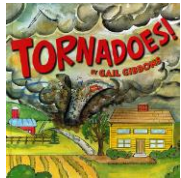




## Extreme Weather Read-Aloud Outline

Kids love to learn about the force of nature, as shown in tornadoes, hurricanes and tsunamis. Indulge kids' love of facts at their fingertips by helping them absorb facts from the nonfiction books listed below.

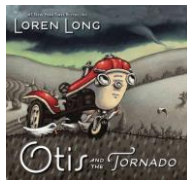
The books below are grouped into fiction and nonfiction sections. Choose books that would be appropriate based on the ages of the children in your Read-Aloud.



***Tornadoes!*** by Gail Gibbons (nonfiction)

Ages 6 and up

Gibbons is known for her ability to explain complex scientific concepts in clear text that even young children can understand. The illustrations in this book are detailed and colorful.



***Otis and the Tornado*** by Loren Long (fiction)

Ages 4 to 6

Otis is a tractor, who is good to all creatures on the farm. The bull is a bully, but he is scared when a tornado approaches. This book has a happy ending after a scary experience.

### More fiction books about extreme weather

*Tsunami!* by Kimiko Kajikawa

Ages 5 and up

*Barn Storm* by Charles Ghigna and Debra Ghigna

Ages 5 to 8

*Hurricane!* by Jonathan London

Ages 4 to 8

*Hurricane* by David Wiesner

Ages 4 to 8

*The Magic School Bus Inside a Hurricane* by Joanne Cole

Ages 6 and up

### More nonfiction books about extreme weather

*MAMA: a true story, in which a baby hippo loses his mama during a tsunami, but finds a new home and a new mama* by Jeanette Winter



Ages 4 and up

*Tornadoes* by Seymour Simon  
Ages 6 and up

*Hurricanes* by Seymour Simon  
Ages 6 and up

*Forces of Nature* by Chana Stiefel  
Ages 7 and up

*Saving Animals in Hurricanes* by Stephen Person  
Ages 7 and up

*Inside Tornadoes* by Mary Kay Carson  
Ages 8 and up

*Tsunami Warning* by Taylor Morrison  
Ages 9 and up

*Hurricanes, Tsunamis and Other Natural Disasters* by Andrew Langley  
Ages 10 and up

### **Activities**

1. Tornado in a plastic bottle. This link shows two methods. Pick the one that works best for you. <http://www.wikihow.com/Make-a-Tornado-in-a-Bottle>



2. Cotton ball hurricane. Give each child a piece of blue paper to represent the ocean. Use cotton balls to create an image of a hurricane. Stretch out the cotton to create the edges of the hurricane. Don't forget the eye of the hurricane in the middle. Explain why the hurricanes are formed in this way by referring to the books on hand. Some kids may want to add landforms to their image.
3. Storm emergency kits. Bring in an emergency kit and discuss the contents. You might include a flashlight, extra batteries (the right size for your flashlight), water, a wind-up radio, nonperishable food, a simple first-aid kit, etc. Explain why each item would be useful in a storm emergency. Ask kids to help create a list of what they would include in their emergency kit so they can ask the staff at that site to create one. Here's a basic supply list to get you started: <http://www.ready.gov/basic-disaster-supplies-kit>.
4. Your own list of hurricane names. Start with a name beginning with the letter "A." Think of names that begin with each letter of the alphabet. Hurricane names alternate between male

and female names, so make sure your list also includes both. For more information on hurricane names, the naming procedures and fun facts, check out The Weather Channel's hurricane-naming page.

[http://www.weather.com/outlook/weather-news/hurricanes/articles/hurricane-names\\_2010-05-24](http://www.weather.com/outlook/weather-news/hurricanes/articles/hurricane-names_2010-05-24).

### **More information about severe weather**

The Weather Channel hurricane page: [http://www.weather.com/outlook/weather-news/severe-weather/articles/hurricane-main\\_2010-05-21](http://www.weather.com/outlook/weather-news/severe-weather/articles/hurricane-main_2010-05-21)

For information about other severe weather events, check out The Weather Channel's weather encyclopedia: <http://www.weather.com/encyclopedia/>.

### **Conversation Starters**

1. Have you ever experienced a tornado or a hurricane?
2. Why are hurricanes more prevalent in the DC area than tornadoes?
3. What's the best way to stay safe in a tornado? What about a hurricane?
4. What's the difference between a severe storm watch and a warning?
5. How long to tornadoes usually last? Hurricanes?

## Nocturnal Animals Read-Aloud Outline

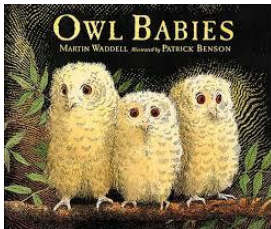
Kids often get to stay up late during the summer. Explore the world of nocturnal animals at your Read-Aloud to get a feel for how the other (nighttime) half lives!



### ***Red-Eyed Tree Frog*** by Joy Cowley

Ages 3 to 8

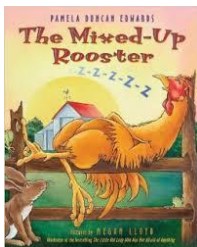
Eye-popping photographs will grab kids' attention in this simple picture book about a tree frog's search for food. Simple text will move you through the story quickly; two pages of detailed information at the end of the book will provide answers to kids' questions.



### ***Owl Babies*** by Martin Waddell

Ages 4 to 6

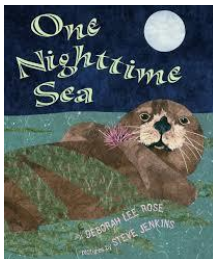
Three owl babies awake to find their mother has gone hunting. They stick together as they worry about what might have happened to her and if she'll return. The illustrations tell as much of the story as the spare, repetitive text.



### ***The Mixed-Up Rooster*** by Pamela Duncan Edwards

Ages 4 to 8

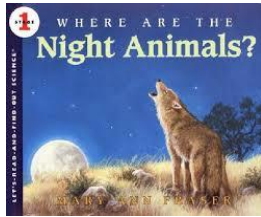
What happens when a rooster isn't a morning person? He gets fired! This silly picture book with its simple text and bright illustrations will delight the youngsters at your Read-Aloud.



### ***One Nighttime Sea*** by Deborah Lee Rose

Ages 4 and up

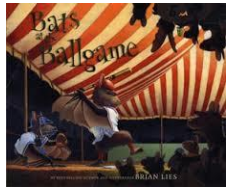
Steve Jenkins' gorgeous cut-paper illustrations take this simple, rhyming counting book about nocturnal sea animals to a new level. Little kids will like the rhyme and counting up from one to nine and back down again, while older kids will love the illustrations and additional information about the animals provided at the back of the book.



***Where are the Night Animals?* by Mary Ann Fraser**

Ages 5 to 7

Lush double-page illustrations make this introduction to nocturnal animals an effective book for a Read-Aloud. Take time to let the kids examine the pictures for animals and details hiding in the dark. Part of the *Let's Read and Find Out* series.



***Bats at the Ballgame* by Brian Lies**

Ages 6 to 10

Bats playing baseball? You bet! Great illustrations, rhyming text and word play will have the kids laughing and pointing at the pictures as you read this book aloud. Additional bat books by Brian Lies are *Bats at the Beach* and *Bats at the Library*.



***Night Creatures* by Susanne Santoro Whayne**

Ages 8 and up

Chockfull of beautiful illustrations and information about nocturnal animals in their respective ecosystems, this picture book is best suited to reading in a small group with older kids. Kids may be most familiar with the animals in the first ecosystem explored: the neighborhood.

**Books about nocturnal people**

*Night Shift Daddy* by Eileen Spinelli

Ages 3 to 5

*In the Night Kitchen* by Maurice Sendak

Ages 3 to 6

*Night Noises* by Mem Fox

Ages 5 to 7

*The Elves and the Shoemaker* by Paul Galdone

Ages 6 to 8

*The Twelve Dancing Princesses* by Rachel Isadora

Ages 6 to 9

*Brothers of the Knight* by Debbie Allen

Ages 6 to 9

## **More books about nocturnal animals**

*Mouse Mess* by Linnea Riley  
Ages 3 to 5

*The Very Lonely Firefly* and *The Very Quiet Cricket* by Eric Carle  
Ages 3 to 5

*Ten on the Sled* by Kim Norman  
Ages 3 to 6

*Whooo's There?* by Mary Serfozo  
Ages 4 to 6

*Stellaluna* by Janell Cannon  
Ages 5 to 8

*Fireflies* by Sally M. Walker  
Ages 6 to 10

*Henry's Night* by D. B. Johnson and Linda Michelin  
Ages 6 to 10

*The Bat Scientists* by Mary Kay Carson  
Ages 8 and up

## **Activities**

1. **Make nocturnal animals.** Bring materials for the kids to make bats, owls, fireflies or their favorite nocturnal animals. This Pinterest page has lots of ideas:  
<http://www.pinterest.com/acollom/nocturnal-animals/>
2. **Play nocturnal animal trivia.** Use this to make a game for the kids or make up your own questions based on the books you plan to read.  
<http://www.funtrivia.com/html5/index.cfm?gid=342852>
3. **Disect owl pellets.** Get a first-hand look at what these predators eat.  
<http://obdk.com/store/products.asp>
4. ***Night Science for Kids: Exploring the World After Dark*** by Terry Krautwurst is full of information and activities about nocturnal animals. Some of them call for taking the kids outside in the dark, but you could just turn off the lights in the Read-Aloud room for the same effect. Some activities include the following:
  - Showing the kids how their eyes change to adapt to the lack of light or how their vision changes in the dark,
  - Practicing listening for night noises,
  - Walking like various nocturnal animals,
  - Using blindfolds to simulate walking in the dark or being a moth and

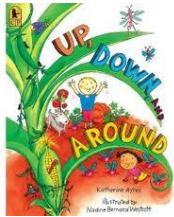
- Experimenting with “artificial fireflies,” using pitchers of hot and cold water and glow sticks.

### **Conversation Starters**

1. Show the kids this short video about nocturnal animals and then ask them about their favorites. Were they surprised that some of the animals are nocturnal? Have they ever seen a fox, bat, owl, firefly or badger? [http://www.youtube.com/watch?v=ql9KBrA\\_3iY](http://www.youtube.com/watch?v=ql9KBrA_3iY)
2. Sometimes people are nocturnal. Brainstorm a list of jobs that might require folks to work at night (baker, doctor/nurse, custodian, police officer, fire fighter, bus or taxi driver, grocery store clerk/stocker). Would the kids like to have any of those jobs?

## Gardening Read-Aloud Outline

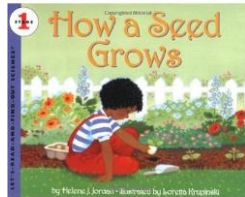
Explore the world of seeds and gardening at your Read-Aloud and prepare to get down and dirty with seeds and books!



### ***Up, Down, and Around*** by Katherine Ayers

Ages 2 to 6

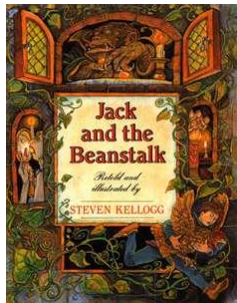
This rhyming book with delightful illustrations just begs to be acted out by young listeners. Kids will love "growing" up, down, or around with the vegetables in this garden. Pair it with *Tops and Bottoms* by Janet Stevens, for ages 4 to 9, or *The Giant Carrot* by Jan Peck, for ages 4 to 8, for a lively discussion about growing vegetables.



### ***How a Seed Grows*** by Helene J. Jordan

Ages 4 to 8

From the *Lets Read and Find Out Science* series, this picture book provides an introduction to how seeds become plants. Pair with *Ten Seeds* by Ruth Brown, for ages 4 to 9. (Don't be fooled by the simple text; a lot is going on in these illustrations.) Or try the lushly illustrated *A Seed is Sleepy* by Dianna Hutts Aston and Sylvia Long, for ages 4 to 12, to explore seeds and their development.



### ***Jack and the Beanstalk*** by Steven Kellogg

Ages 5 to 10

When regular seeds sprout, it seems like magic. When magic seeds sprout, things get crazy! Read this beloved folktale in a traditional version (Steven Kellogg has illustrated a great one.) and then introduce some revised versions. *Kate and the Beanstalk* by Mary Pope Osborne, for ages 5 and up, and *Jim and the Beanstalk* by Raymond Briggs, for ages 4 to 8, are good choices. For ages 9 and up, try the graphic novel called *Calamity Jack* by Shannon and Dean Hale.



### ***Anno's Magic Seeds*** by Mitsumasa Anno

Ages 8 and up

Explore math, economics, farming and the environment with older children at your Read-Aloud. A wizard gives Jack some magic seeds (sound familiar?), and a fun mathematical progression begins. You can count all the seeds in the pictures or figure out a way to calculate Jack's harvest.



## **More books about gardening**

***The Surprise Garden*** by Zoe Hall

Ages 2 to 6

***Jo MacDonald Had a Garden*** by Mary Quattlebaum

Ages 4 to 6

***The Gardener*** by Sarah Stewart

Ages 8 to 12

WETA's *Start with a Book* program has an excellent outline for reading with kids about gardening. It includes books about gardening and directions for planting seeds with kids.

[http://www.readingrockets.org/content/pdfs/literacybags/Gardening\\_2013.pdf](http://www.readingrockets.org/content/pdfs/literacybags/Gardening_2013.pdf)

## **Helpful Gardening Websites and Videos**

If you plan to be planting seeds or growing sprouts with the kids, start some a few days ahead so they can see what to expect.

- How to sprout lentils or alfalfa: <http://www.youtube.com/watch?v=J4n5p1rmTiw>
- Time-lapse video of radish seeds growing: <http://bit.ly/1nIQxkh>
- Ideas for gardening with kids from Mary Quattlebaum, author of ***Jo MacDonald Had a Garden***: <http://maryquattlebaum.com/documents/GardeningandKids.pdf>.

## **Activities**

1. These activities focus on seeds and the fruits and vegetables that carry them. Use *The Vegetables We Eat* by Gail Gibbons and/or *A Fruit Is a Suitcase for Seeds* by Jean Richards to explore how fruits transport seeds to new locations. If food is allowed at your Read-Aloud site, let the kids eat the fruits and vegetables. Ask the staff about food allergies before providing food at any Read-Aloud.
2. Bring seeds and the fruits or vegetables that come from them and challenge the kids to match them up.
3. Plant or sprout seeds with the kids (see video or *Start with a Book* suggestions.)
4. If your site has a vegetable garden, ask if you can pick vegetables with the kids to use in a Garden Pasta Salad.

## **Garden Pasta Salad**

### Ingredients:

- green onions
- fresh basil
- cherry tomatoes
- shredded zucchini or summer squash
- diced peppers
- fresh shredded parmesan cheese
- olive oil
- cooked pasta

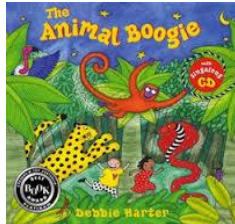
Bring precooked pasta. The kids can tear the basil, cut the green onions with scissors or kitchen shears, and squish (or halve) the cherry tomatoes. A volunteer should cut peppers and anything else that requires a knife. Put the cooked pasta on top of the prepared vegetables in a big bowl. Stir and add a few glugs of olive oil and the cheese. Add salt and pepper to taste.

## **Conversation Starters**

1. Make a connection between the stories you read and the kids' daily lives. Explore their experience with fruits and vegetables by asking lots of questions. What fruits and vegetables do the kids like to eat? How do different fruits and vegetables taste (sweet, sour, savory)? How does cooking or seasoning fruits and vegetables change them, for better or worse? Which fruits and vegetables do the kids like raw, versus cooked?
2. Brainstorm the different kinds of seeds we eat: bananas, strawberries, pumpkin, sunflower, tomatoes, rice, raspberries, cucumbers, zucchini, corn, kiwi, peas, beans of all kinds, etc. How long can your list get? Then poll the kids on which seeds they like best and which they've never tasted. Chart the results for a visual representation.
3. Ask the kids what they would do with magic seeds or beans. Plant them? Share them? Sell them? Did Jack's beanstalk grow more magic seeds? What happened after he (or Kate or Jim) cut down the beanstalk? Encourage the kids make up or act out some magic bean stories!
4. For older Read-Aloud participants: Seeds can be seen as a kind of plant savings account. Who is responsible for caring for the seeds and plants? What happens when a storm destroys crops (see *Anno's Magic Seeds*) or plants become extinct (see *The Lorax* by Dr. Seuss)? What are heirloom plants or seeds? (Heirloom roses are part of the story in *Jackson Jones and the Curse of the Outlaw Rose* by Mary Quattlebaum.)

Need a Read-Aloud theme with mystery, drama, great visuals, folktales, current events, science, geography and food? Want opportunities for movement and deep discussions? Take a trip to a tropical rain forest.

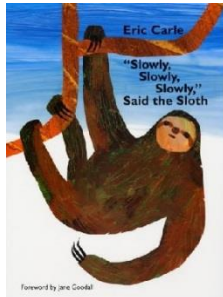
## **Fiction**



### ***The Animal Boogie* by Debbie Harter**

Ages 3 to 5

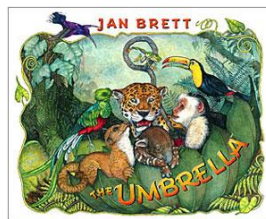
Get the kids moving with this rhyming, repetitive picture book that begs to be acted out. The kids will be shaking, swinging, stomping and flying their way around the jungle.



### ***“Slowly, Slowly, Slowly,” said the Sloth* by Eric Carle**

Ages 3 to 6

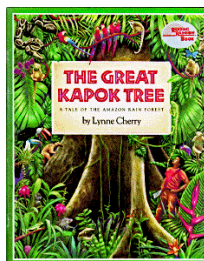
Meet animals of the Amazon rain forest as they wonder about the unusual habits of a sloth. The simple text and Carle’s vibrant cut-paper illustrations will appeal to young kids at your Read-Aloud. This book provides a springboard for discussion about the animals of the rain forest and about synonyms.



### ***The Umbrella* by Jan Brett**

Ages 5 to 8

What kind of animals will you see in the cloud forest of Costa Rica? Carlos hopes to see a tree frog, a tapir, a monkey and more when he takes his umbrella on a walk into the cloud forest. He leaves it on the ground upside-down to climb a tree to see the animals. While he’s gone, all the animals he hoped to see take shelter in his umbrella until there are too many for it to hold.

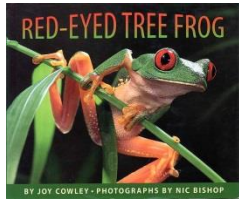


### ***The Great Kapok Tree* by Lynne Cherry**

Ages 8 to 12

When a man falls asleep under a huge tree that he is trying to cut down, animals that depend on the tree whisper in his ear, begging him not to destroy their home. Lynne Cherry’s detailed illustrations are enthralling. A second book by Cherry, *The Shaman’s Apprentice*, explores the natural medicine used by an Amazonian tribe.

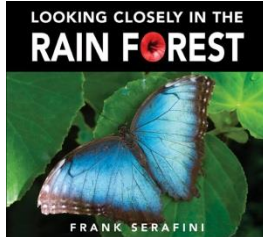
## Nonfiction



***Red-Eyed Tree Frog*** by Joy Cowley

Ages 3 to 6

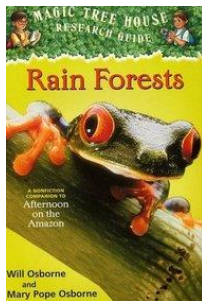
Eye-popping photographs will grab kids' attention in this simple picture book about a tree frog's search for food. Simple text will move you through the story quickly; two pages of detailed information at the end of the book will provide answers to kids' questions.



***Looking Closely in the Rain Forest*** by Frank Serafini

Ages 3 and up

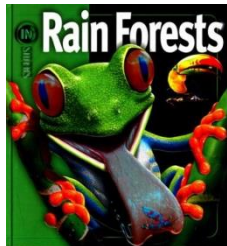
Even big kids will like guessing what rain forest plant or animal is shown in each close-up photograph. This short, interactive book is a great way to either introduce the topic of rain forests to your group or to let them demonstrate their knowledge.



***Rain Forests: Magic Tree House Research Guide*** by Will Osborne and Mary Pope Osborne

Ages 6 to 9

Many kids in your Read-Aloud may know *Afternoon on the Amazon*, part of the Magic Tree House series. This research guide is the nonfiction companion to *Afternoon on the Amazon*, and provides information about the plants and animals of the Amazon. Pair with *Afternoon on the Amazon* for a fun read.



***Rain Forests*** by Richard C. Vogt

Ages 6 to 12

This book explores the plants and animals of the tropical rain forest in great detail. Dynamic photos, illustrations, diagrams and maps enhance each section of the book. Best used with a small group of kids or in a one-on-one situation. This book provides a great opportunity to show how to use an index and section headings to find answers to questions.

## More books about the tropical rain forests

***Jazzy in the Jungle*** by Lucy Cousins

Ages 3 to 5

***On the Banks of the Amazon/En las orillas del Amazonas*** by Nancy Kelly Allen

Ages 4 to 6

***Amazon Boy*** by Ted Lewin

Ages 5 to 8

***A Walk in the Rainforest/Un Paseo por el Bosque Lluvioso*** by Kristin Joy Pratt  
Ages 5 and up

***Fernando's Gift/El Regalo de Fernando*** by Douglas Keister  
Ages 5 to 9

***Jabutí the Tortoise: A Trickster Tale from the Amazon*** by Gerald McDermott  
Ages 5 to 9

***Breakfast in the Rainforest: A Visit with Mountain Gorillas*** by Richard Sobol  
Ages 10 to 12

***Amazon: You Decide How to Survive*** by David Borgenicht and Hena Khan  
Ages 10 to 12

### **Activities**

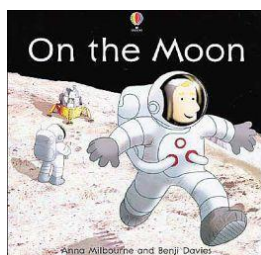
1. Your group can create a living demonstration of the rain forest and reinforce some vocabulary from the books you've just read. Have the taller kids stand on a row of chairs at the front to represent the trees of the emergent layer. Another row of students stands on the floor in front of them as the trees of the canopy. A third row of students kneels in front of them as the low-growing plants of the understory, while the remaining students lie on the floor to be the plants on the forest floor. Encourage the kids in each layer to name plants and animals that live in their layer. Discuss how much light each layer receives and how plants and animals adapt to little light.
2. Play Rain Forest Simon Says. After you've read books about rain forest animals, make up a Simon Says game using those animals and their movements or sounds. "Simon says, 'Howl like a howler monkey.'" "Simon says, 'Flit like a blue morpho butterfly.'" "Simon says, 'Climb slowly like a sloth.'"
3. Make a kapok tree. Trees are crucial to the rain forest. They make up the emergent layer and the canopy. They create oxygen and provide habitat for countless plants and animals. Encourage the kids to make their own tree and then decorate it with animals that might live there. You will need to bring small paper bags, scissors, glue, colored tissue paper and markers. This website will show you how this works:  
<http://pikadillycharm.blogspot.com/2011/11/paper-bag-fall-tree.html>.
4. Make a rain forest in a jar. Bring the tropics to your Read-Aloud by creating terrariums. Growing plants in an enclosed container allows the kids to see the water cycle up close. You will need to bring rocks, potting soil, plants (mosses, ferns and African violets work well) and jars or containers with lids. This website will show you what to do:  
<http://hikebloglove.com/2012/05/09/science-and-nature-for-kids-make-a-rainforest-in-a-jar/>.

## **Conversation Starters**

1. Show the kids this graphic of foods (link below) that come from the rain forest. Ask the kids which of these foods they like, how they think they get harvested and brought to stores and restaurants. How would we get these foods if the rain forest were destroyed?  
[http://www.teachingideas.co.uk/themes/rainforests/\\_files/rainforestfoodslabels.pdf](http://www.teachingideas.co.uk/themes/rainforests/_files/rainforestfoodslabels.pdf)
2. Use these rain forest fact cards to get the kids talking about different aspects of the ecosystem and how it is threatened.  
[http://www.teachingideas.co.uk/themes/rainforests/\\_files/rainforestsdiyoudknow.pdf](http://www.teachingideas.co.uk/themes/rainforests/_files/rainforestsdiyoudknow.pdf)
3. Ask the kids “what if?”
  - What if you could be any animal or plant in the rain forest, which one would you choose to be? Why?
  - What if your family moved to live in a tropical rain forest? How would it be different? How would it be the same?
  - What if it was your job to protect the rain forest from being cut down or a specific animal from extinction? What would you do?

## Space Read-Aloud Outline

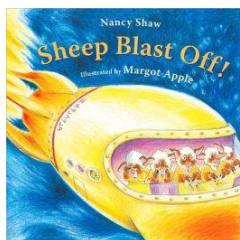
Capture kids' imaginations this summer with an out-of-this-world Read-Aloud! Outer space offers many topics to read about. There are galaxies of both fiction and nonfiction books on this topic. This Read-Aloud is sure to have kids absolutely blasting off with excitement!



### ***On the Moon*** by Anna Milbourne

Ages 3 to 6

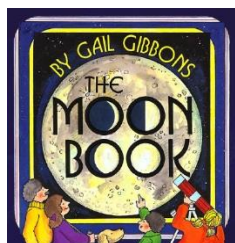
Beginning with the question, "What do you think it would be like to go to the moon?" this book describes basic aspects of moon travel: shuttles, space suits and zero gravity. Simple, sparse text makes this a great book to read with a group of young kids.



### ***Sheep Blast Off!*** by Nancy Shaw

Ages 3 to 6

"Something has landed! What can it be?" The sheep find out in this picture book. Shaw's sheep, featured in other titles, including *Sheep in a Jeep*, *Sheep Out to Eat* and *Sheep Take a Hike*, discover a spaceship and blast off through the stratosphere. With minimal, rhyming text and hilarious pictures of sheep shenanigans, this book answers the age-old question: what mischief would sheep get up to in space?



### ***The Moon Book*** by Gail Gibbons

Ages 5 to 8

A pleasant combination of narrative, illustration and facts, this book focuses on a basic astronomical mystery: our own moon! It's organized so that you can read as little or as much as you want; you could read the narrative to a big group, giving as many facts as you like, or you could focus on the details if you're reading to just one child.

### **More space books**

*Bugs in Space* by David A. Carter

Ages 4 to 6

*I Want to be an Astronaut* by Byron Barton

Ages 4 to 8

*DK First Space Encyclopedia*

Ages 5 to 8



*The Moon Might Be Milk* by Lisa Shulman  
Ages 5 to 8

*Comets, Stars, the Moon and Mars: Space Poems and Paintings* by Douglas Florian  
Ages 5 to 10

*Star Seeker: A Journey to Outer Space* by Theresa Heine  
Ages 6 to 9

*Once Upon a Starry Night: A Book of Constellations* by Jacqueline Mitton  
Ages 7 to 10

*13 Planets: The Latest View of the Solar System* by David A. Aguilar  
Ages 8 to 12

For more books and activity ideas, check out Reading Rockets Reading Adventure Pack on stars, <http://www.readingrockets.org/article/51766>.

## **Activities**

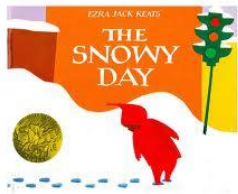
1. **Solar System Mobile.** This craft requires quite a bit of preparation, but it's not difficult to put together and makes an awesome take away. Use paper plates, yarn and pre-cut paper circles (nine per set, of various sizes – these will represent the eight planets and the sun) to make a mobile of the solar system. It will be easiest if you bring a number of paper plates with holes for yarn already punched in them, so that all the kids have to do is decorate their "planets" with crayons and markers and hang them from the paper plate. The following version of the craft is more elaborate than what we have in mind, but the basic idea is the same:  
[http://www.lpi.usra.edu/education/skytellers/solar\\_system/activities/ss\\_string.shtml](http://www.lpi.usra.edu/education/skytellers/solar_system/activities/ss_string.shtml).
2. **Constellation Cards.** Using *Once Upon a Starry Night* and *Zoo in the Sky*, ask each kid pick a favorite constellation. (If you have a big group, you might want to photocopy some of the pages so everybody can look at them at the same time.) After picking a constellation, ask the kids to draw the shape of the constellation and then to trace it in glue on black paper. Next, have them place their card on top of a paper plate (for easier cleanup) and shake silver glitter over their card to outline their constellations in glitter.
3. **Human Solar System.** For an activity that involves some moving around, make a model of the solar system with your bodies! First, explain that planets move around the sun and that the amount of time it takes a planet to move around the sun is one year. Next, assign either a kid or a volunteer to be the sun and each remaining kid to be a planet. Put each kid assigned to be a planet a different distance from the "sun." Then have everybody move around the sun. Their orbits should take different amounts of time, with "inner planets" completing their orbits faster than "outer planets." Go around for a few "years" (times around the sun) for every planet. Why do some planets take longer to go around the sun than other planets?

## **Conversation Starters**

1. Teach the kids a mnemonic device for remembering the order of the planets in our solar system.
  - Mother – Mercury
  - Very – Venus
  - Thoughtfully – Terra (Earth)
  - Made – Mars
  - A – Asteroid Belt
  - Jelly – Jupiter
  - Sandwich – Saturn
  - Under – Uranus
  - No – Neptune
  - Protest – Pluto (mention that Pluto is a dwarf planet)
2. What is the distinguishing characteristic of each planet? (Mars is red, Jupiter has a big spot, Saturn has rings, etc.) Which planets are made of rock and which ones are made of gas? Do other planets have water? Do they have moons? Ask questions and let the kids respond. Encourage conversation and speculation about extraterrestrial life. Bring age-appropriate scientific sources on both sides of this issue so kids can see how to find info on a topic that interests them.
3. Ask the kids if they would go into space if they had the option. Why or why not? If they want to go, where would they like to go? A short trip on the shuttle? A trip all the way to Mars?

## States of Matter Read-Aloud

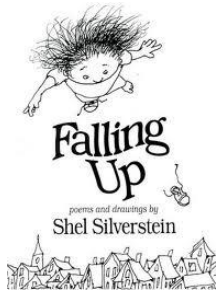
This Read-Aloud introduces the three states of matter and steps of scientific inquiry: prediction (hypothesis), observation (experimentation) and evaluation. Start with books about snow and a demonstration of water in the three states (liquid, solid and gas) and then move on to one of two activities that allow the kids to explore more deeply and practice their scientific inquiry skills.



### ***The Snowy Day*** by Ezra Jack Keats

Ages 3 and up

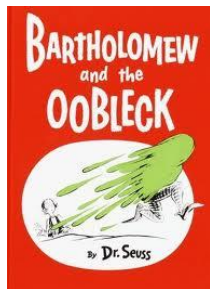
This beloved picture book, with its bold, cut-paper collage illustrations and simple text, chronicles a little boy's adventures in the snow. It also provides an introduction to the states of matter when the snowball he makes and brings into the house melts, turning from a solid to a liquid.



### **“The Snowball”** by Shel Silverstein in ***Falling Up***

Ages 6 to 10

This short poem describes the fate of a snowball brought inside. Again—an introduction to the states of matter when the snowball melts, turning from a solid to a liquid.

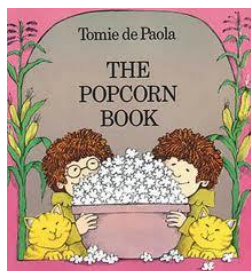


### ***Bartholomew and the Oobleck*** by Dr. Seuss (use TRC's abridged version)

Ages 6 to 10

What happens when you want something new to fall from the sky? You might just get oobleck. What is it? It's not rain, it's not snow, but it is a mess! This Dr. Seuss favorite is a great introduction to a fun and messy exploration of the states of matter.

**OR**



### ***The Popcorn Book*** by Tomie De Paola (use TRC's abridged version)

Ages 6 to 10

Everything you ever wanted to know about popcorn, including how it relates to the states of matter. The reason kernels pop is that the water inside expands to become a gas when heated.

## Additional books

***The Wind Blew*** by Pat Hutchins (Ages 4 to 8)

What happens when the wind blows? This rhyming tale explores the havoc created by a gas blowing through town.

***The Three Little Pigs*** (any version) (Ages 4 and up)

The wolf harnesses the power of a gas by huffing and puffing to blow houses down!

***What Is the World Made Of? All About Solids, Liquids and Gases*** by Kathleen Weidner Zoehfeld (Ages 4 to 8)

Simple text and illustrations provide descriptions of the states of matter in everyday situations that kids will recognize.

***Experiments with Solids, Liquids and Gases*** by Christine Taylor-Butler (Ages 6 to 10)

This book explains the characteristics of the different states of matter and offers several easy experiments.

***Super Science Lab*** by Harris (Ages 7 to 10)

With more than 100 experiments, including “Slime Time” (the basis for our Oobleck activity), this book is sure to excite young scientists about exploration and discovery.

***What is a Scientist?*** By Barbara Lehn (Ages 4 to 8)

What does it mean to be a scientist? This book helps kids understand the work scientists do and how they do it.

Books about glaciers, oceans, lakes or rivers and clouds will also provide the opportunity to explore, more deeply, water in its three states.

### **Intro to States of Matter**

You will need water, ice and an electric kettle.

Read *The Snowy Day* and “The Snowball” to introduce the idea of states of matter. Ask the kids what happened to the snowballs.

Then relate their answer to the states of matter: The snowballs were solids, but then they became liquids when they melted.

Ask kids if they can guess what the third state of matter is. Show them ice and water. Ask if anyone can tell you what water is called in the third state.

Explain that today they will be scientists exploring the states of matter. They will **predict**, **observe** and **evaluate** what they see.

Ask them to **predict** what will happen to water when you heat it up.

Ask them to **observe** as you boil water in the electric kettle. Ask them what they see (what they **observe**) and point out the steam if need be. (Be careful to keep kettle and steam away from kids.)

Talk about how heat can change states of matter: Heat can turn a solid to a liquid to a gas (as with water) or heat can turn a liquid into a solid (as with pancake batter on the stove).

If you need a movement activity, you could change some of the words to the song *Going on a Bear Hunt* to reflect snow/ice, water, fog, wind, mud, etc.

### **Popcorn states of matter activity**

You will need popcorn, a hot air popcorn popper (TRC has one to borrow), small, medium and large mixing bowls, cups or coffee filters to serve popped popcorn in.

Ask kid if they can name another gas besides steam. Give a hint that it is all around us.

Read *The Wind Blew* by Hutchins (gas) or *The Little Three Pigs* (gas) and talk about air.

Talk about how the wind is so strong in the three little pigs that it knocks down the house. That's a gas.

Ask the kids if they know what makes popcorn pop. Show kids the hot air popper and how much unpopped popcorn you will add. Have them guess what happens (**predict**) when the popcorn kernels get heated up in the popper.

Ask them to **predict** which size bowl it will fill (have a small, medium, and large bowl).

Pop the popcorn and have the kids **observe**: what do they see, smell, hear and feel? Which bowl did the popcorn fill?

Talk about how the popcorn pops: water inside the kernel turns to steam and makes the kernel explode. Revisit or **evaluate** what their predictions were about volume and about what would make the kernels pop.

Eat the popcorn! And read a little bit from *The Popcorn Book* by Tomie de Paola or other books on hand together or in small groups.

If you need a movement activity try this Popcorn in the Popper energizer:

<https://www.youtube.com/watch?v=Koi-EDhYxA>

### **Oobleck states of matter activity**

<http://www.kidzone.ws/science/cornstarch.htm> instructions and activity sheet

NOTE: If you have a large group, make two batches in two different bowls and pour it into rimmed cookie sheets for kids to put their hands in.

Put newspaper or plastic down first, as it's hard to get out of the carpet!

Also make sure there is a bucket of water on hand for kids to rinse their hands in before washing them

DO NOT put corn starch mixture/oobleck down the drain. It will solidify and clog the drain. Wipe it into a trashcan before washing the cookie sheet or any other utensils you use.

Read *Bartholomew and the Oobleck* (abridged version from TRC office)

Ask them, is Oobleck real? What if we could make some?

Do Cornstarch Suspension/Oobleck experiment.

Ask kids to **predict** what the oobleck will feel like. What will happen to it if you let it drip from your fingers? What will happen when you squeeze it in your fist or try to stir it?

Encourage them to **observe** what the oobleck does when they compress it. Have kids wash hands in bucket when they are done playing with the oobleck.

Encourage the kids to talk about or draw pictures on the activity sheet. Oobleck (your cornstarch concoction) is actually a suspension which sometimes acts like a liquid and sometimes acts like a solid.

Read some of the nonfiction books in small groups if there is time.

## **Cornstarch Suspension/Oobleck Activity**

<http://www.kidzone.ws/science/cornstarch.htm>

### **What you need**

- 1 cup cornstarch
- ABOUT 1/2 cup water
- food coloring
- bowl
- spoon
- pie plate or cookie sheet
- newspaper
- bucket of water for rinsing hands
- paper towels
- Optional: Cornstarch Suspension Printable Activity Sheet

### **Directions**

- Empty 1 cup of cornstarch into a large bowl.
- Stir while you add water SLOWLY -- don't add all of it if you don't need to.
  - You need the consistency of thick pancake batter.
  - It's better to add too little water than too much.
  - Take your time!
- Add a few drops of food coloring.
- Stick your hands in the mixture.
  - Record what it feels like.
  - What happens when you try to roll some into a ball and then leave it alone?
- Pour the water into a pie plate. (water is a liquid)
  - Smack it with your hand.
  - Record what happens.
- Pour the cornstarch mixture into a pie plate or cookie sheet.
  - Smack it with your hand.
  - Record what happens.
  - Does it act differently than the water?

### **What Happened:**

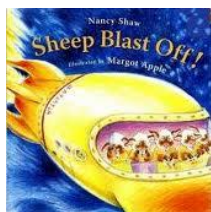
When we talk about "states" of matter, we usually talk about the three types: solid (like a rock), liquid (like water) and gas (like the air we breathe).

A mixture of cornstarch and water make what is known as a suspension. When you squeeze the Cornstarch Suspension it really feels like a solid because its molecules line up. But it looks like a liquid and acts like a liquid when no one is pressing on it because the molecules relax. This is another state of matter, called a suspension (It can act like a liquid, or, when pressed like a solid.).



## Rocket Read-Aloud

Rockets capture the imagination. With rockets you get explosions, speed, and exploration. Read about real and imaginary rockets and then build some with the kids.



***Sheep Blast Off*** by Nancy Shaw, illustrated by Margot Apple

Ages 4 to 8

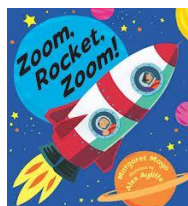
A bunch of sheep accidentally launch a rocket into space with hilarious results. Encourage the kids to observe the illustrations carefully for evidence of aliens. Point out important space and rocket vocabulary like engines, stratosphere, autopilot and orbit.



***This Rocket*** by Paul Collicutt

Ages 4 to 10

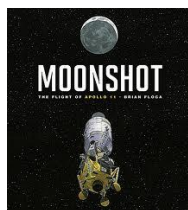
Simple text and bold illustrations will appeal to younger kids, but older ones will like discussing the different uses and aspects of the rockets shown. The end papers show important rockets in history and depict the different stages of the Apollo 11 mission.



***Zoom, Rocket, Zoom!*** By Margaret Mayo, illustrated by Alex Ayliffe

Ages 4 to 6

Action-packed, repetitive text and bold illustrations will make this an appealing Read-Aloud book for young kids.



***Moonshot: The Flight of Apollo 11*** by Brian Floca

Ages 8 to 12

Floca describes the first mission to land on the moon in detail. The large format and detailed pictures make this book ideal for reading aloud to a group. The endpapers show the different rocket components and how the rocket broke apart in flight, to get the astronauts to the moon and back.

## Additional books

***Dogs in Space*** by Nancy Coffelt (Ages 4 to 9)

Dogs explore the planets in our solar system using personal jetpack rockets. It's a silly introduction to the planets in our solar system, but could also serve as a spring board for discussion about the possible use of jetpacks. TRC has a copy for your use.

***To Space and Back*** by Sally Ride with Susan Okie (Ages 6 to 12)

Most of this book deals with what it is like to be in space on the space shuttle, but the photos

and diagram are amazing, including shots of the shuttle launch and of astronauts using jetpacks.

***Let's Go to the Moon*** by Janis Knudsen Wheat, drawings by Bill Burrows (Ages 6 to 12)  
This National Geographic book has photos from several Apollo missions to the moon. Simple drawings explain rocket ignition sequences, the process of landing on the moon, exploring and then returning to Earth. TRC has a copy for your use.

### **Activities**

1. Build rockets with the kids using straws, tape and balloons.

[http://www.nasa.gov/pdf/418003main\\_OTM\\_Launch\\_It.pdf](http://www.nasa.gov/pdf/418003main_OTM_Launch_It.pdf)

2. The NASA website has lots of videos, activities and games for kids. There's also a lot of background information to use and share with the kids about rockets, space, the space shuttle and much more. <http://www.nasa.gov/centers/marshall/about/launchpad/rocket.html>

3. Make personal jetpacks using soda bottles, tissue, tape and markers

<http://www.oneperfectdayblog.net/2012/09/25/how-to-make-a-jet-pack-easy-diy-dress-up-for-kids/>

### **Conversations**

How do rockets work? What makes them take off?

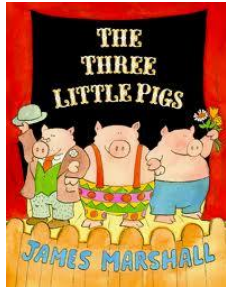
How do rockets land?

What are the purposes for rockets? What can rockets do?

If you had a rocket, what would you use it for?

## House-Building Read-Aloud Outline

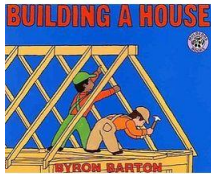
Who knew the Three Little Pigs were engineers? They solved problems with design. Each needs a house and each chooses a different material and design to make a house, with differing results. Start out a Read-Aloud about houses with a version of the Three Little Pigs, then explore different kinds of houses and materials, and finally encourage the kids to build houses using different materials.



***The Three Little Pigs*** by James Marshall

Ages 4 and up

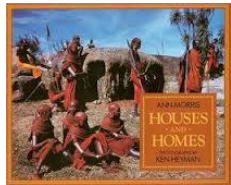
Any version of the *Three Pigs* story will do to introduce the idea that using different building materials will result in types of stability.



***Building a House*** by Byron Barton

Ages 4 and up

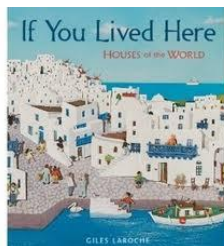
This step-by-step book is clear for even the very young children. It shows the different workers and the different machines used in building a house.



***Houses and Homes*** by Ann Morris, photographs by Ken Heyman

Ages 4 to 8

Simple text and lots of photos explore houses from all over the world.



***If You Lived Here: Houses of the World*** by Giles Laroche

Ages 8 to 12

Amazing cut-paper illustrations depict sixteen different types of houses from all over. Descriptions for all include the type of house, materials, location and the date that the type of house was first built.

### **Other books about houses and building**

***A House is a House for Me*** by Mary Ann Hoberman, illustrated by Betty Fraser (Ages 4 to 8)  
Rhyming text and detailed illustrations explore houses for ants, whales, duchesses and Eskimos.

***Building Our House*** by Jonathan Bean (Ages 4 and up)  
Cute drawings of the building process and old photographs of the actual building of the family house in the country.

***Henry Builds a Cabin*** by D. B. Johnson (Ages 5 to 10)  
Simple text and delightful illustrations allow the reader to follow along as Henry David Thoreau builds his house at Walden Pond. Detailed notes at the end explain about Thoreau and his work at Walden Pond.

***Steven Caney's Ultimate Building Book*** by Steven Caney (Ages 10 and up)  
Easy-to-follow instructions for the older child includes a huge number of projects.

***Castle*** by David Macaulay (Ages 10 and up)  
*Castle* is illustrated with detailed black and white drawings showing the steps to the each structure. A read-aloud based completely on David Macaulay books would interest a great many older children.

### **Activity**

BUILD! TRC has a set of Lincoln Logs and a set of Legos for building. Throw in some index cards and encourage the kids to build structures out of the different materials and explore their stability. You may have to show the kids how to build a house out of the cards (use a carpet square for the base for a card house.) Ask your kids to **predict** which houses will be the most stable, to **observe** which houses are the most stable and then **evaluate** the pluses and minuses of each of the building materials.

If your site has a set of blocks, you can use them too. Allow at least 20 minutes for the children to build.

### **Conversations**

Where do you live? What kind of house would you like to live in?

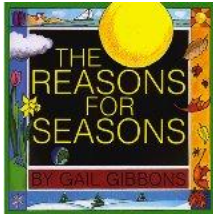
How do people and animals use what is available to make a house?

How would you build a house underwater? What about on the moon? What about in the side of a hill?

What kind of houses to bears and beavers make? What about other kinds of animals?

## Time Read-Aloud Outline (Rock Around The Clock)

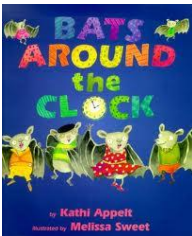
During the summer, the days are longer and the nights are shorter. Why? Time is a fun concept to read about with all ages, though it can be a bit too abstract for the youngest kids at Read-Alouds. With those kids, you can focus on days of the week.



### ***The Reason for Seasons*** by Gail Gibbons

Ages 5 to 8

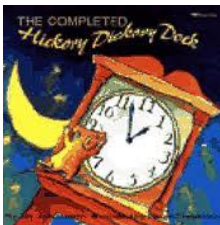
Gibbons has an amazing way of making scientific information understandable for any age. Her graphics are clear and the text is straight forward. The book explains the relationship between the earth and the sun, and how this causes seasons.



### ***Bats Around the Clock*** by Kathi Appelt

Ages 4 and up

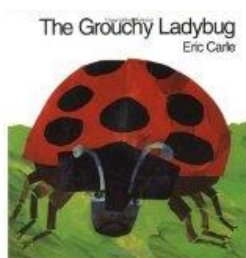
It's fun to tell time as you dance around the clock! Put on your dancing shoes and get ready to boogie! It's American Batstand - a twelve-hour rock and roll extravaganza with Click Dark as your host. Decked out in go-go boots and bobby sox, the buoyant bats bebop their way around the clock. And there's a special guest appearance at the end! Telling time has never been so much fun!



### ***The Completed Hickory Dickory Dock*** by Eileen Christelow

Ages 3 and up

Hickory dickory dock--we all know about the mouse and the clock, but what happened after the clock struck one? Follow that energetic mouse through the other eleven hours of nonstop fun in an appealing book that begs to be read aloud.



### ***The Grouchy Ladybug*** by Eric Carle

Ages 4 and up

This book has a lot more than you would expect. Children can learn basic time telling, increasing sizes, and the cycle of day to night. It is a very unique book which fosters discussion between parents and kids. It allows adults to talk with kids about right and wrong behavior, about cooperation and conflict, and about standing up to bullies. Very young children don't understand why the grouchy ladybug seems so angry. He wastes his whole day threatening to fight with larger animals until he ends up right where he started.

## Additional books

### ***Boom Chicka Rock*** by John Archambault (Ages 3 to 5)

A rollicking, rhythmic romp through the numbers.

### ***Tell Time with the Very Busy Spider*** by Eric Carle (board book) (Ages 3 to 6)

The very busy spider doesn't have time to talk to the other animals because she's building a web. Spin the hands on the clock to set the time on each page.

**10 Minutes to Bedtime** by Peggy Rathmann (Ages 3 to 7)

This nearly wordless book chronicles the last ten minutes before bedtime for a young boy when a pack of hamsters come to play.

**Me Counting Time: From Seconds to Centuries** by Joan Sweeney (ages 4 to 8)

A child explains the time units from a second to a millennium in easy to understand terms.

**About Time: A First Look at Time and Clocks** by Bruce Koscielniak (Ages 5 to 8)

This non-fiction book about clocks is full of facts and photos.

**Clocks and More Clocks** by Pat Hutchins (Ages 6 to 10)

Older children will have to solve a riddle about the different times on the clocks.

### **Books about days and months**

**Cookie's Week** by Cindy Ward (Ages 2 to 5)

This is a sweet tale of a mischievous kitten's antics through each day of the week.

**The Very Hungry Caterpillar** by Eric Carle (Ages 2 to 6)

A very hungry caterpillar eats through something different each day of the week until he's ready to make a cocoon.

**Chicken Soup With Rice** by Maurice Sendak (Ages 4 to 8)

This rhyming book describes the best ways to eat chicken soup with rice throughout the year.

### **Chapter Books to suggest as give-aways for older children**

**Hugo Cabret** by Brian Selznick (Ages 8 and up)

This Caldecott winner with black and white drawings was turned into a movie. The spell-binding mystery takes place in the Paris train station clock tower.

**The Borrowers** by Mary Norton (Ages 7 and up)

This classic chapter book tells the adventures of a tiny family that lives in the walls of a house behind the grandfather clock. The family adventures stretch your imagination.

### **Activities**

1. Teach the nursery rhyme "Hickory Dickory Dock."

#### **Hickory Dickory Dock**

Hickory, dickory, dock,  
The mouse ran up the clock.  
The clock struck one,  
The mouse ran down,  
Hickory, dickory, dock.

For more nursery rhymes, check out a very comprehensive list at <http://www.nurseryrhymes.com/>.

2. Sing and dance to "Rock Around the Clock." The music and lyrics can be found here: <http://www.youtube.com/watch?v=O21xFX7QBpE>.

3. Make your own clocks out of paper and a brass brad. You can leave a one in the room with the time for the Read-Aloud to start. Find a clock and hand templates here: <http://www.handwritingforkids.com/handwrite/manuscript/clock/craft-clock.htm>

4. Make your own clock pages for *The Grouchy Ladybug*. Kids can either recreate what happens in the book or choose their own time and animals to include. Templates can be found here: <http://learningandteachingwithpreschoolers.blogspot.com/2012/05/grouchy-ladybug.html>

5. Bring in various kinds of timers (a stop watch, an egg timer, a cell phone timer, an hourglass) and examine how they are similar and different.

6. Make a sundial out of a paper plate and a straw. Take it outside and test get it set to tell time. <http://www.nwf.org/Kids/Family-Fun/crafts/sundial.aspx>.

7. Have the kids compete in challenges during set time periods. For example, how long can you stand on one foot? Or how many sit-ups can you do in 30 seconds?

7. If you talk about days and months, let the child decorate a calendar page for the current month or their favorite month.

### **Conversation Starters**

How long is a day?

How long is a week?

How long is a month?

How long is a year?

What is a leap year? Why do we have them?

Do we have longer days during the winter or the summer?

Do we have longer nights during the winter or the summer?

Do we really need clocks?

Would you be happier without clocks?

What is your favorite kind of clock?

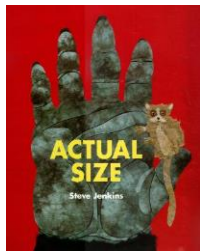
What is your favorite time of day, day of the week or month? Why?



## **Measurement Read-Aloud**

Just how big is a gorilla's hand? How small is a goldfish? Measurement is a fun topic to read about because just about everything can be measured. Measuring units like inches and centimeters is useful for comparisons, but what about measuring your height in post-it notes or the length of your hand in paperclips?

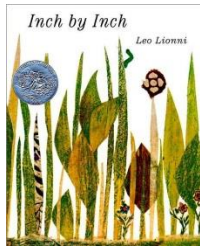
### **Books about Measurement**



***Actual Size*** by Steve Jenkins

Ages 3 to 12

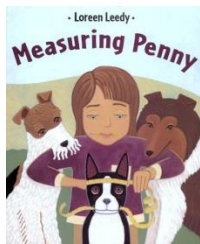
Jenkins' vivid illustrations find a way to show the actual size of animals from the two-inch pygmy shrew to the enormous African elephant, by highlighting the parts that fit on a page. This book doesn't need to be read straight through—you can jump around and choose different animals the kids are interested in.



***Inch by Inch*** by Leo Lionni

Ages 3 to 7

An inchworm measures all the birds it encounters and by doing so convinces them not to eat him. But can it outsmart the nightingale who wants to eat him by measuring its song?



***Measuring Penny*** by Loreen Leedy

Ages 7 to 9

A young girl measures her dog in several different ways and does the same for the various dogs at the park using different units of measurement.

### **Additional books about Length**

***The Long and Short of It*** by Cheryl Nathan and Lisa McCourt (Ages 3 to 7)

Animals' differences make them unique. Compare similar body parts and find out which animals have short or long noses, tails and beaks.

***Twelve Snails to One Lizard: A Tale of Mischief and Measurement*** by Susan Hightower (Ages 5 to 8)

Bubba the bullfrog helps Milo the beaver build a dam by explaining to him the concepts of inches, feet, and yards.

***Me and the Measure of Things*** by Joan Sweeny (Ages 4 to 8)

A child explains the units of measurement in easy to understand terms.

## **Books about Quantity**

***Room for Ripley*** by Stuart J. Murphy (Ages 6 to 9)

How much water do you need to fill a fishbowl? Carlos finds out as he gets ready to bring home his new pet.

***Pastry School in Paris: An Adventure in Capacity*** by Cindy Neuschwander (Ages 7 to 10)

Two kids explore the challenges of measuring while cooking pastries.

## **Activities**

1. The following activities go well with *Actual Size*, but most could be used in isolation and without the book. \*\*Be sure to remove all the masking tape from the floor at the end of the read-aloud.

- a) Measure the tallest kid and the smallest kid at the Read-Aloud for comparison. Use masking tape on floor to mark their height. (You can also measure them as they arrive and are getting their name tags.)
- b) Compare kids' hands to the gorilla hand in the book or to copies of that page. If you have time, trace each child's hand and cut it out to compare the size of the hands.
- c) Pass around dimes for the kids to feel their weight. The animal on the title page of *Actual Size*, the pygmy shrew, weighs less than a dime. Pass around an egg for kids to compare with the size of the ostrich egg picture. Measure the two eggs and compare.
- d) As you are reading, use a tape measure to show how big or small things are, and mark those sizes on the floor with tape too.
- e) Measure out some of the bigger or smaller animals in the book and mark them on the floor. See how many kids will fit in a bigger animal—like an Alaskan Brown Bear—or how many of their hands or feet would fit in a smaller animal like a giant moth.

2. Children love learning how to use a measuring tape and measuring themselves. Let them practice by finding the size of their hands, feet, and heads. They also think it is fun to measure with non-standard units like toothpicks or post-it notes.



## Air Travel Read-Aloud Outline

Why not give your Read-Aloud kids a thrill by sending them on an airplane "flight"? Print out boarding passes and set up the room like an airplane by laying carpet squares in rows like airplane seats. Ask the children to check in with their boarding pass, fasten their imaginary seat belts and fly to a glorious destination. Offer an in-flight snack of pretzel sticks.



**Miss Mouse Takes Off** by Jan Ormerod

Ages 3 to 6

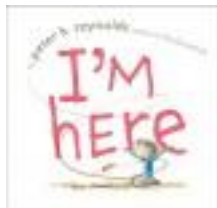
The little girl brings her stuffed mouse on an airplane ride. They go through security and entertain themselves on the long trip to get to Grandma.



**Amazing Airplanes** by Tony Mitton

Ages 3 to 6

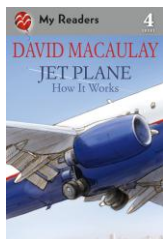
Rhyming text introduces airplanes, with information about how planes fly, safety rules, in-flight entertainment and air traffic control.



**Here I Am** by Peter H. Reynolds

Ages 4 and up

In a crowded park, a boy makes an airplane out of a piece of paper carried to him by a gentle breeze. He sends it on its way, and a new friend brings it back.



**Jet Plane: How It Works** by David MacCauley and Sheila Keenan

Ages 6 to 10

David MacCauley, famous for nonfiction illustrated books, such as *The Way Things Work*, brings his easy-to-understand style to this early reader about how jets work.

### More airplane books

**A is for Airplane /A es para Avion** by Theresa Howell (Ages 3 to 5)

This bilingual alphabet board book is great, but its small size means it is best for small groups.

**Airplanes** by Byron Barton (Ages 3 to 5)

Barton combined brief text with large, colorful illustrations. This is a great first airplane book.

**Take Off!** by Ryan Ann Hunter (Ages 3 to 6)

Colorful illustrations and easy-to-understand text covers the history of air travel and some monumental flights in history.

***How People Learned to Fly*** by Fran Hodgkins (Ages 4 and up)

A part of the Let's-Read-And-Find-Out series, this book explains how humans learned to fly, starting with the Greeks and ending at the modern day.

***Airplane: Machines at Work*** by Caroline Bingham (Ages 5 to 10)

This nonfiction book explains the various aspects of air travel including the vehicles seen around an airport, the particulars of a pilot's job and air traffic control.

### **Activities**

1. Pretend that the Read-Aloud space is an airport and airplane.
  - Give children their very own boarding pass for the flight (<http://bit.ly/11GBY0L>). Ask each child to state his name and issue a name tag after "scanning" each boarding pass. Taking attendance is fun when disguised as the boarding process!.
  - Send the kids through security. Everyone can empty their pockets and pretend to go through the scanner..
  - Have each child get settled in her own seat (carpet mat) and secure her imaginary seat belts before takeoff.
2. Make and decorate airplanes out of Popsicle sticks and clothespins (<http://www.parents.com/fun/arts-crafts/kid/simple-wood-crafts/?rb=Y#page=4>), or buy simple wooden airplanes from a dollar store. Decorate with markers, foam shapes, etc.
4. Make airplanes out of straws and strips of paper. They're easier to make than paper airplanes and fly just as well. Here is a link with instructions: <http://www.allfortheboys.com/home/2011/8/25/move-over-paper-airplanes.html>.
5. Make paper airplanes, then decorate and fly them. Which models fly the farthest? This activity is most successful with kids aged seven and older. For reference and folding instructions, try ***Fun and Easy Paper Airplanes*** by Andrew Dewar and ***The Paper Airplane Book*** by Seymour Simon. Or print out some designs from <http://www.10paperairplanes.com/>.

### **Conversation Starters**

Have you ever flown on an airplane?

What is the best part about flying?

What is the worst part (or scariest part) about flying?

If you could travel anywhere, where would you like to go?

Would you like to be a pilot? A flight attendant? An aeronautical engineer?

What things are you not allowed to take on an airplane?

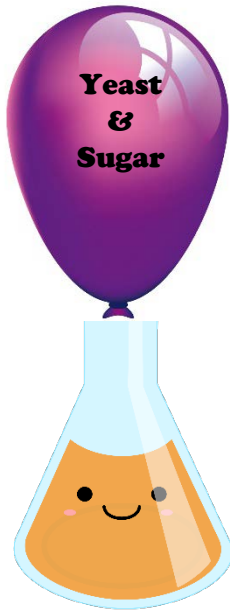
What things would be good to take to keep you busy?

What is the farthest place you think you could travel to on a plane? Why must some planes stop and refuel during long flights?

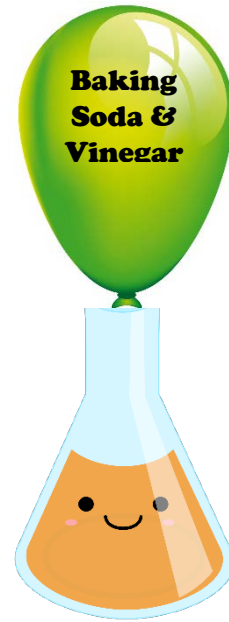
What is jet lag? Why does it happen? Has anyone ever experienced jet lag? What are some ways to deal with jet lag?

# Leavening Agents

**Making fluffy breads and cakes**



**Yeast eat the sugar and produces carbon dioxide ( $\text{CO}_2$ ) gas. The gas bubbles make the dough expand.**



**Baking soda reacts with vinegar to produce salt, water, and carbon dioxide ( $\text{CO}_2$ ) gas. The gas bubbles make the dough expand.**



**Baking powder contains soda and acid already mixed together. When activated by water it produces salt, water, and carbon dioxide ( $\text{CO}_2$ ) gas. The gas bubbles make the dough expand.**

# Leavening Agents

## Materials:

1. **Three bottles, glass works best but plastic is fine**
2. **Three different color balloons**
3. **1 cup of warm water in each bottle**
4. **1 Tablespoon baking powder**
5. **1 Tablespoon baking soda**
6. **1 Tablespoon vinegar**
7. **1 Tablespoon yeast**
8. **1 Tablespoon sugar**
9. **2 funnels**

## Procedure:

**Label bottles for the experiment by the leavening agent. Talk to youth about what leavening agents do and explain how they work. Encourage the youth to make a hypothesis to predict what they think will happen and why. Pour water into the bottles. Using a separate funnel so that the dry powders do not stick to the wet funnel, add powders. Immediately slip the balloon over the opening of the bottle. You can swirl the mixture to speed up the reaction but do not tip them over into the balloon. Allow the reactions to inflate the balloon over the course of five to ten minutes. Measure the balloons and determine which produced the most carbon dioxide. Encourage the youth to make observations about which balloon inflated fastest and slowest. Which balloon inflated the most and least? Other observations?**