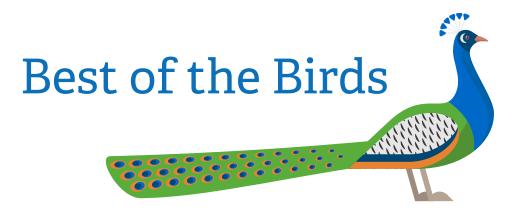
# Appendix

Best of the birds

Bird words

Printable templates

Reading Rockets tip sheets



## **Birds with Amazing Crests**

Attractive crowns help male birds attract female mates. Learn about 10 birds with amazing crests, which show the diversity of bird plumage and the unique features that have evolved. https://themysteriousworld.com/birds-with-most-beautiful-crests/

## Birds with Spectacular Beaks (Bills)

Explore birds' beaks to see the many weird ways that birds have evolved to get their food. https://www.audubon.org/news/10-wonderfully-weird-bird-beaks

## **Birds with Strange Sounds**

Not all bird sounds are musical. Some have evolved to produce songs and calls that seem eerie, odd, or humorous to human ears.

https://www.audubon.org/news/five-bird-calls-will-make-you-laugh

## **Birds that Hold Records**

Meet the biggest, the smallest, the fastest, and more. https://www.audubon.org/news/world-records-10-superstars-avian-world

## **Birds that Are Champion Long-Distance Migrants**

Find out about the incredible journeys of 7 species that migrate great distances. https://www.birdlife.org/worldwide/news/migration-marathons-7-unbelievable-bird-journeys



## Adaptations

Process of change by which a bird becomes better suited to its habitat

Aerodynamics The way objects move through air

Auriculars Feathers that cover the ears of a bird

## Barb

Feather within a feather that contains even smaller parts that hook together to keep the main feather smooth

Beak / bill More than the bird's mouth, functions like a hand, a comb, gets food, kills prey

**Bipedal** Using two legs for walking

**Breeding** The process of producing babies (offspring)

**Binocular vision** When both eyes can focus on one thing at the same time.

Cache A safe place for hiding food (or other valuables) from others who may want to take it

**Call** Short vocalization of a bird usually given as an alarm or for contact.

**Carnivore** Animal that eats a diet of mostly meat

Carnivorous Eating other animals

Carrion The flesh of dead animals



## Concave

Having a surface that curves inward like that of a dinner plate placed on a table

Dinosaurs

Prehistoric reptiles that lived about 250 million years ago

**Diurnal** Active during the day

**Ecosystem** A community of living things in a shared environment.

**Evolved** Developed slowly into something else

**Evolution** The changes of characteristics of a species over time

**Extinction** The dying off of a species

## Fable

A short story usually with animals that act like people as the main characters and that often teach a lesson on proper behavior

Flock

Birds of one kind feeding, resting, or travelling together.

## Forage

To search for food

**Fossil** The remains or impression of a prehistoric organism

## Habitat

The natural environment of an animal or plant.

## Hypothesis

A guess you make based on information you already know



## Instinct

A non-thinking response that an organism is born with to deal with the environment

## Learned behavior

Behavior that an organism develops through experience, either its own or from others.

## Lek

A meeting ground for male birds to gather and dance or display in hopes of attracting a female.

## Lift

The forces on an object that force it to move perpendicular to the direction of flow. Lift can be in any direction but we usually think of objects going up.

## Marsh

A low, wet, muddy area, often thick with tall grasses.

## **Mnemonics**

Something to help assist memory.

## **Migration**

Seasonal movement of animals from one place to another.

#### Migrate

To move seasonally from one area to another

#### Nocturnal Active at night

## Paleontologist

A scientist who studies the record of life on Earth left as fossils

#### **Pishing**

A sound humans make that may attract birds

## **Pollinators**

Animals that move or carry pollen to a plant, allowing the seeds to be fertilized.

## Preening

Straightening and cleaning the feathers with the bill



## Prey

An animal that is hunted and killed by another for food.

## Raptor / Bird of prey

Birds that eat other animals. Most hunt live prey (hawks, eagles, falcons, owls) but some eat dead animals (vultures)

## **Reptiles**

A class of animals that includes snakes, lizards, turtles, tortoises, and crocodiles

**Roosting** Settling down to rest or sleep

#### **Spatial memory**

Brain activity that enables people and animals to remember different locations as well as spatial relations between objects.

## Scrape

A shallow depression scratched into the bare ground used by some bird species for nesting.

## **Species**

Group of living things (such as birds) with similar characteristics and are able to produce young. There are more than 9,000 bird species.

## **Talons**

The claws of a bird of prey

## Theropods

A diverse group of bipedal dinosaurs that include the largest terrestrial carnivores and the ancestors of birds

## Vocalization

To make a sound. Bird vocalization includes bird calls and bird songs.

## Watershed

The area of land drained by a river, river system, or lake.

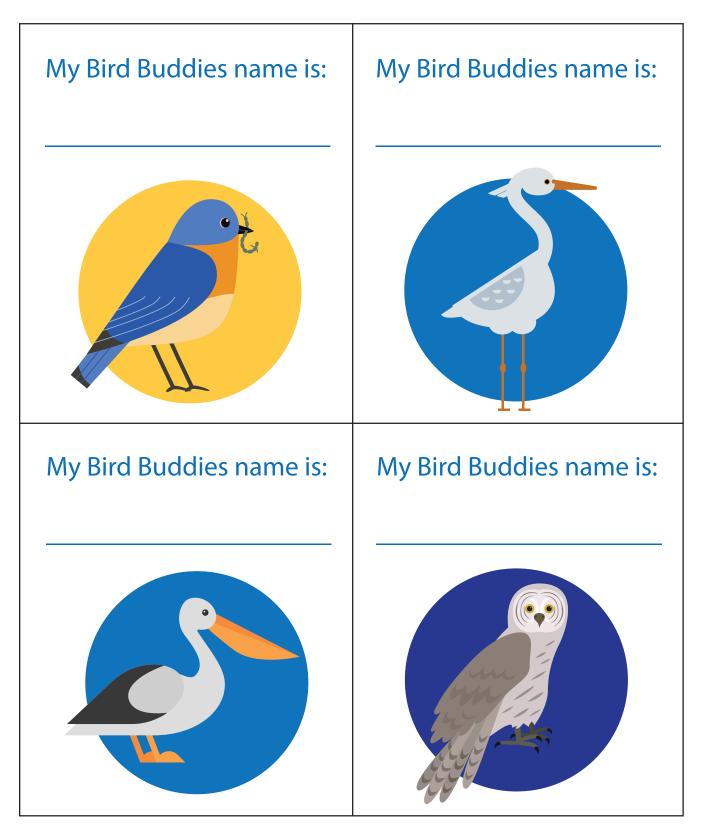
## **Bird Buddies Name Cards**

Make copies of these name tags and let child each choose their own Bird Buddies name. They can select from the Bird Words list (Barb, Flock, Pish, Roost, or Scrape?) or a bird you like (Raven, Owl, Egret, Crow, Sparrow, Hummingbird?).



## **Bird Buddies Name Cards**

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Fold cover along dotted lines



Fold cover along dotted lines





## Growing readers!

Parent tips for raising strong readers and writers from Reading Rockets



## **Reading Aloud: Fiction Books**

## The basics

- Take your time and talk about the story and pictures with your child.
- Ask your child questions and let your child ask questions.
- Read with expression to create excitement.
- You don't need to read every word. Keeping your child interested is the goal.

## Try "think alouds"

When you share books with your children, they are learning to think and act like good readers without even knowing it! You can help them get even more from reading time when you talk to them as you read.

Children learn when they can make connections between what they hear and what they know. One method you can use to help make these connections is called a think aloud, where you talk through your thoughts as you read. Here are three ways to use think alouds, with examples from some of our favorite kids' books.

## Connect the book to your child's own life experience

Example: A River Dream by Allen Say

"This book reminds me of the time my father took me fishing. Do you remember the time we went fishing?"

## Connect the book to other books they have read

Example: Mufaro's Beautiful Daughters by John Steptoe

"This story reminds me of Cinderella. Both stories are about sisters. Do you know any other stories about nice and mean sisters? Let's keep reading to find out other ways the stories are similar."

## Connect the book to big ideas/lessons

Example: Stellaluna by Janell Cannon

"This story helps me understand that we are all the same in many ways, but it's our differences that make us special."

Modeling these types of connections will help young readers know how to do it when they read alone!



## Growing readers!

Parent tips for raising strong readers and writers from Reading Rockets



## Reading Aloud: Nonfi tion Books

## The basics

- Wonder out loud. As you are reading (or afterward), talk about facts you find i teresting or questions you have.
- Explore the pictures and other graphics in the book, such as charts and diagrams.
- Don't be afraid to jump around, reading pages that especially interest your child. You don't have to read a nonfi tion book straight through.

## Getting the most out of nonfi tion reading time

Nonfi tion books give kids a chance to learn new concepts and vocabulary, as well as broaden their view of the world. Here's how to take a "book walk" with a new nonfi tion book and how to model active reading.

## Take a "book walk"

One great way to make predictions about an unfamiliar nonfi tion text is to take a "walk" through the book before reading. By looking closely together at the front and back cover, the index, table of contents, the glossary, and the photographs or other images, readers can start to get a sense about the topic. This scanning and skimming helps set the expectation for the reading. Take the time to walk through the book before starting to read.

## **Encourage questions**

A second way to develop more understanding with nonfi tion books is to encourage your child to be an active reader who asks lots of questions. Parents can model these behaviors by talking or thinking out loud as you turn the pages of the book. This is a helpful way for your child to see and hear what a successful reader does when faced with difficult or unfamiliar opics.

For example, "When I looked at this photograph, I asked myself, "Where is Antarctica? Is that the same place as the South Pole?" Then talk together about how and what you would need to do to find the answer to the questions. This will reinforce that many questions can be answered by reading a text closely and by paying attention to captions and picture titles. Some children enjoy writing their questions on sticky notes and working to answer them during the reading.

Previewing a text and asking questions are two terrific ays to navigate nonfi tion texts. Enjoy spending more time with some fascinating informational books!

# Growing readers!

Brought to you by Reading Rockets, Colorín Colorado and LD OnLine

## Literacy in the Sciences: Activity No. 14 How to Read Nonfiction Text

Kids love to read about real people, places, and events. Nonfiction books present real information in engaging and interesting ways. However, most kids read a lot more fiction than nonfiction, so spend some extra time helping your reader learn how to navigate a nonfiction book.

#### **Talk about nonfiction**

Begin by explaining that the book you're about to share is nonfiction. That means that the book will give us information that is true. The book will be organized around a specific topic or idea, and we may learn new facts through reading. Some kids even enjoy sorting their home libraries into fiction and nonfiction books. This simple categorization task helps your child understand the difference between fiction and nonfiction.

#### Look at the parts

Most good nonfiction books will have helpful features that are not a part of most fiction books. These parts include a table of contents, an index, a glossary, photographs and charts with captions, and a list of sources. Share the purpose of the features with your reader.

- Table of Contents: Located at the front of a book, the table of contents displays a list of the big ideas within the book and where to find them.
- **Index:** An index is an alphabetical list of almost everything covered within the book, with page numbers. Readers can use the index to look up specific terms or concepts and go right to the specific information they're looking for.
- **Glossary:** Located at the back of the book, a glossary contains key words that are related to the topic and their definitions. These definitions provide more information about new vocabulary words.
- **Captions:** Captions are usually right under photographs, figures, maps, and charts. Captions give a quick summary of what information is presented in the graphic.
- **Photos and Charts:** A lot of information can be found by "reading" the charts and photos found within nonfiction text. Readers will first need to figure out what information is presented. Then they'll need to discover how to navigate the information. Some charts use clear labels, others require more careful examination. Help your reader learn more about the different ways information can be displayed.

#### Be the reading boss

Nonfiction books do not have to be read from cover to cover. Readers can use the table of contents and index to jump right to the information they are most interested in. In that way, they are the "reading boss" of that book! However, if your reader wants to read from cover to cover, encourage him to use the table of contents to understand how the book is organized. "First we will learn about the different types of frogs. Then we'll learn where they can live, what they eat, and how they survive." Passages from the book can be reread as often as necessary until your child understands what is written. You can refer to pictures, charts and tables over and over again as well.

As natural learners, young readers are drawn to books that give information about something or explain something they've always wondered about. With a little help and guidance about reading nonfiction, you can feel good about introducing your child to a new world of information.







## Growing readers!

Brought to you by Reading Rockets, Colorín Colorado and LD OnLine

## Summer Literacy Challenge!

For most parents, it's a challenge to keep kids reading and writing all summer. Suddenly 10 weeks of summer can feel like a very long time! We've got a summer literacy challenge for you and your child. It's modest enough to be manageable –pick just one thing a week to kick start your week's literacy adventures. But it's also challenging enough to include a wide range of literacy fun for the whole family.

- ✓ Investigate your public library's summer reading program. Most libraries offer a special program or two during the summer, including puppet shows, book authors and children's storytellers. Most are free of charge.
- Extend your reading circle. We often find ourselves checking out the same types of books over and over again. This week's challenge is to bring a new type of book into the house. Consider fantasy or science fiction, historical fiction, poetry, biography, or an informational book.
- Listen up! Audiobooks are a great way to engage readers and can introduce students to books above their reading level. Many libraries have audiobooks available for check out, and an Internet search can turn up several sites, including Speakaboos.com, that offer free audio books for children.
- Make your own audio book! Most phones and computers have simple recording apps on them which are perfect for making homemade audio books! Have your child make up a story, or reread a favorite loved book. The recordings will be priceless!
- ✓ Go wordless. Wordless picture books are told entirely through their illustrations they are books without words, or sometimes just a few words. Grab a few wordless books the next time you're at the library and have fun "reading" different versions of the same story. The language and the conversation will inspire you!
- ✓ Visit a museum, online! You'll be surprised by how much you can explore without leaving your house. One example is the Smithsonian Institution Kids site. It's complete with offerings from Art to Zoo, for kids and students of all ages.
- ✓ Pack in a whole adventure! Find FREE themed reading adventure packs that encourage hands-on fun and learning, centered around paired fiction and nonfiction books. Visit Reading Rockets and search Adventure Pack.
- ✓ Point, shoot, and write. Most families have access to a digital camera, iPad or camera phone. Snap some photos and then encourage your child to write a silly caption for each photo. Not feeling that ambitious? Cut out some pictures from a magazine or the newspaper and have your child write original captions for those.
- Mix up the media. Your child has read every Clifford book on the shelf. But has she heard Clifford author Normal Bridwell talk about writing? Explore author interviews from over 100 authors on Reading Rockets Author Interview page. We'll bet you can't watch just one.
- ✓ Write it down. Encourage your child to keep a simple journal or summer diary. Track interesting things like the number of fireflies seen in one minute, the number of mosquito bites on a leg, or the different types of food that can go on the grill. Each entry is a chance to be creative!

Reading Rockets, Colorín Colorado, and LD OnLine are national education services of WETA, the flagship public broadcasting station in Washington, D.C.







# Growing readers!

Brought to you by Reading Rockets, Colorín Colorado and LD OnLine

## Literacy in the Sciences: Activity No. 4

## Making Predictions

As a young reader, your child is learning to make predictions while reading. "What do you think will happen next?" "Who do you think drank Sara's lemonade?" These types of questions we ask children as they're reading help them learn to monitor their understanding of the story while thinking ahead to the next part. If your child is able to make good and fairly accurate predictions while reading, chances are she comprehends the story well.

Scientists, just like readers, make predictions all the time. In fact, scientists use predictions as part of their hypothesis, or question they try to answer through their experiments. Help your child begin to see the connection between what she does as a reader and what she can do as a scientist.

Below are two simple ways you can encourage your child to put her prediction skills to work as a scientist:

- 1. Play favorites. What is our family's favorite flavor of ice-cream? What is our favorite movie to watch together? What is our favorite bedtime story? Choose a question, or make up your own, that your child is excited about. First, have your child predict or guess the answer to the question. Help her write down her prediction. "I think chocolate is our family's favorite flavor of ice cream." Then, have your child ask each member of the family for an answer. Have your child record the answers using a special Science Notebook or simply mark tally marks on paper. Finally, ask your child to compare her prediction to the actual answers.
- **2. Good guess!** Estimation is often very similar to a prediction. In both cases, your child will be working to make a good guess about an answer. As with our Play Favorites idea, encourage your child to write down (or write together) the questions and answers in a special Science Notebook. Whenever possible, encourage the use of scientific words like estimation, predication, collect data, analyze, and prove. Here are some estimation questions that require your child to make a prediction:
  - How many noodles will it take to fill up this jar? Encourage your child to use scientific language and thinking to answer. "I predict it will take 300 noodles to fill the jar."
  - How many steps is it from our front door to the mailbox?
  - How much does our dog weigh?
  - How many library books fit on one shelf?
  - How long do you think it will take for the ice cubes to freeze (or melt)?

We predict your child will have great fun with these activities! And you can have fun knowing that you're helping your child make important connections between the skills of prediction, reading, and science.







# Growing readers!

Brought to you by Reading Rockets, Colorín Colorado and LD OnLine

## Literacy in the Sciences: Activity No. 11 Making Inferences and Drawing Conclusions

Observations occur when we can see something happening. In contrast, inferences are what we figure out based on an experience. Helping your child understand when information is implied, or not directly stated, will improve her skill in drawing conclusions and making inferences. These skills will be needed for all sorts of school assignments, including reading, science and social studies. Inferential thinking is a complex skill that will develop over time and with experience.

Families can create opportunities to practice inferential thinking. Below are a few ways to help familiarize your child with this way of thinking and learning:

- Explain to your child that we make conclusions about things and draw inferences all the time. Draw a conclusion together and then talk about what clues were used to come to that conclusion. For example, Erin played outside today. How can we tell? Muddy shoes, jump rope on front porch, water bottle out. Dad seems tired tonight. How can we tell? He's rubbing his eyes, he's on the couch, he was yawning at the dinner table.
- Paper bag mystery person: Put a few items into a brown paper bag. Tell your child the bag belongs to a certain type of person. Their job is to tell you something about the person. Then, take out each item one by one and talk about it.
  - o Example #1: goggles, a swim cap, a swim ribbon, a stop watch
  - o Example #2: a bookmark, a library card, a stuffed animal, a book
- Wordless picture books provide your child with practice using clues to create meaning. There are no wrong stories with wordless picture books, only variations based on what the "reader" sees and puts together. *Rosie's Walk* (Hutchins), *Good Dog, Carl* (Day), and *Beaver Is Lost* (Cooper) are all interesting and fun wordless picture books to explore.
- Play twenty questions! This familiar word game helps build inference skills. As your child develops skill with the game, encourage him to avoid asking direct questions like, "Is it a dog?" Rather, encourage him to ask broader questions, "Does it walk on four feet?" Then, when your child figures it out, ask him to tell you the clues that lead to the right answer.
- Create scenarios in which your child must use what they already know to predict an outcome. For example, growing seeds. Present your child with various scenarios (a seed will be given water and sunlight, a seed will get no water, a seed will be in a dark room). Ask your child to predict whether the seed will grow. Help your child become aware that she used information she knew about growing seeds, combined with new information, to fill in information about the seeds.

Learning to draw conclusions and inferences is a skill that develops over time. The skill requires children to put together various pieces of information, and relies on good word knowledge. Help your child develop skill by providing experience with inferential information, making implied information more clear, and helping your child draw conclusions based on the evidence.







# Growing readers!

Brought to you by Reading Rockets, Colorín Colorado and LD OnLine

## Literacy in the Sciences: Activity No. 6 Recording Observations

Science and math explorations provide your growing reader with a chance to record all kinds of observations. Young children love to keep a special journal, and fill it with all sorts of drawings, scribbles, sketches, notes, and graphs. Try to date each entry and watch as your child's observational and recording skills grow along with your child.

#### **Create a special journal**

Use any paper for the cover: cardstock, interesting cardboard and pretty greeting cards can all be used as a cover. Then, collect some twigs from the backyard and find a large, thick rubber band. Fold your cover in half. Fold your inside pages, and put them inside the cover. Trim as needed. Punch two holes with a hole punch, measuring down from the top and up from the bottom about 2 inches. Pull one end of the rubber band through the bottom hole and slide twig into the loop. Pull the other end of the rubber band through the top hole and slide the other end of twig through that. You now have a special journal into which your budding scientist can record observations.

#### A scientist's field notes

Begin using the science journal by taking your child outside. Encourage your child to write down what she observes about her surroundings, looking at both the big picture and the small, examining plants and rocks and insects up close. Have her make a record in their journal of what they experience with each of their senses. Then have her choose one animal or plant to watch for 10 minutes. Your child can choose anything: a dandelion, a grasshopper, a bird soaring overhead. Ask her to describe it as clearly as they can, as if she is writing for someone who's never seen that before. Have her watch for movements and take note of any sounds made. Ask your child to draw and label a picture of the plant or animal.

#### Other fun ideas to record in your field journal

A flower tally: Count the flowers in an area in the spring once a week for three weeks. Compare your tallies. Your child will have fun watching the numbers go up as flowers bloom in the spring.

**Ant watching:** There are ants everywhere! Try following them to their home and see what they're up to. Where do they live? How many can you count in one place? Record these observations and your ant grand total.

**Dig a hole:** As parents know, dirt can be pretty interesting to kids. Have your child dig a hole and notice how the dirt changes as he digs deeper. Can he describe the different layers? What creatures did he find as he dug? Record these and other interesting findings in the journal.

**Nature scavenger hunt:** Use your notebook to make (or draw) a list of some common things and a few rare ones that can be found outside near your home or in a park. Include things like: acorn, pine cone, flat rock, bird feather, weed, flower. Hand your child the notebook and let the scavenger hunt begin!

Special thanks to the Two Writing Teachers (www.twowritingteachers.wordpress.com) for their field journal directions, and Nature Rocks (www.naturerocks.org) for the nature-based ideas for family fun.





