



*Launching young readers!*

# Reading Rockets

Literacy in the Sciences: Activity No. 8  
 Patterns and Categorizing  
 By: Reading Rockets

Children begin using their senses to recognize patterns and categorize things at a young age — skills that play an important role in early learning. This tip sheet provides some simple activities, as well as recommended books, that parents can use to help their kids build pattern recognition and categorization skills in science and math.

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Even our youngest children are able to recognize patterns and use categories to process new information. Almost everything we see, hear, or touch contains details that our brain processes. Without realizing it, our brain is looking for what is new, what is different, and what has changed. New information is matched to a category that already exists in our mind.

This need to find order, to compare and contrast, and to pay attention to what remains the same is an important part of early learning. As your child becomes a reader, he or she will learn to find patterns in letters and words and use this information to read groups of words (for example, sun, fun, bun all contain the '-un' letter pattern or family). Your reader will also categorize words by sounds (for example short/long vowel words, rhyming/non rhyming words) or by meaning (for example words that mean the same thing, words that are opposites).

Parents and caregivers can build pattern recognition and categorization skills in science and math through these four simple activities:

Sort it

Provide lots of opportunities to explore many kinds of materials that can be sorted and categorized by size or shape. These include small plastic toys such as animals and

vehicles, Unifix cubes (or other "manipulatives"), blocks, or other small objects such as coins, stamps, cups, and bottle caps. Have children explore different ways sort objects into similar groups. The groups, or categories, could be general concepts such as "hard things" "soft things" or something personal, such as "things that were gifts," "things I found."

### Same and different

Help your child learn about different classifications scientists use to help them organize information. Use children's books from the library to learn more about different classifications of animals, for example, mammals and reptiles. Discuss what reptiles and mammals have in common, and what makes each unique.

### Riddle me this

Use riddles to help your child gain practice with "rules," which are part of patterns and categorizing. For example, "I am a shape. I have four sides. Each side is the same length." Good listening and a growing ability to sort through information will help your child solve the riddle correctly.

### Make a mini grocery store

Save your food boxes and juice containers for a few days. Gather them up and enlist your child in stocking the shelves. Designate one area for grains, another for dairy, and another for proteins. Have your child sort the objects into the correct location. This is a great opportunity to talk about healthy food choices.

Patterns, categories, and classifications are a part of everyday life and everyday learning. Use these ideas to help jump start conversations with your young learner.

### Recommended children's books



<http://www.amazon.com/exec/obidos/ASIN/0064467295/readingrocket-20>

### Dave's Down-to-Earth Rock Shop

By Stuart J. Murphy

After Josh receives a strange rock from his uncle, he consults a rock shop owner expert to learn about his unusual gift. Josh notices that the store's display window features stones arranged by size, and as his knowledge of geology grows, he sees the classification schemes in the window becoming more and more complex. (Ages 4-8)

- [Purchase book](http://www.amazon.com/exec/obidos/ASIN/0064467295/readingrocket-20)(<http://www.amazon.com/exec/obidos/ASIN/0064467295/readingrocket-20>)



<http://www.amazon.com/exec/obidos/ASIN/0374423288/readingrocket-20>

Five Creatures  
By Emily Jenkins

A charming story about a family of five: three people and two cats. The little girl in the story classifies every member according to their likes and dislikes, appearance, skills, and habits. One example: "Four who like to eat fish&#133; two who like to eat mice. Only one who likes to eat beets." (Ages 4-8)

- **[Purchase book](http://www.amazon.com/exec/obidos/ASIN/0374423288/readingrocket-20)**



<http://www.amazon.com/exec/obidos/ASIN/0887768857/readingrocket-20>

Same Same  
By Marthe Jocelyn

A young girl explores Arizona's Sonoran Desert, recording her thoughts, scientific facts, questions, and experiences in a nature journal decorated by her paintings of the native plants and animals. This book is a great way to introduce kids to scientific journals and the importance of close observation. (Ages 4-8)

- **[Purchase book](http://www.amazon.com/exec/obidos/ASIN/0887768857/readingrocket-20)**



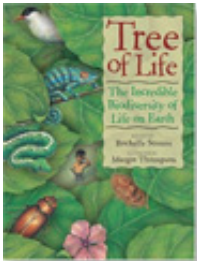
<http://www.amazon.com/exec/obidos/ASIN/1934359327/readingrocket-20>

Sort It Out!

By Barbara Marioconda

This picture book is a humorous introduction to sorting and classifying. Packy the Pack Rat comes home with a cart full of things — a locket, a book, an umbrella, a pinecone, and other random items. After his mother asks him to put it away, Packy begins sorting things with similar characteristics, such as color, shape, or where they were found. Children who like to collect may be inspired to bring order to their own treasures. (Ages 4-8)

- [Purchase book](http://www.amazon.com/exec/obidos/ASIN/1934359327/readingrocket-20)(<http://www.amazon.com/exec/obidos/ASIN/1934359327/readingrocket-20>)



<http://www.amazon.com/exec/obidos/ASIN/1553376692/readingrocket-20>

Tree of Life: The Incredible Biodiversity of Life on Earth

By Rochelle Strauss

A dazzlingly illustrated and child-friendly introduction to the complex topic of biodiversity and classification, and how all living things, from bacteria to the largest mammals, are related. The book provides detailed information about each of the "five kingdoms" and the different species that make up each kingdom. (Ages 6-12)

- [Purchase book](http://www.amazon.com/exec/obidos/ASIN/1553376692/readingrocket-20)(<http://www.amazon.com/exec/obidos/ASIN/1553376692/readingrocket-20>)

<http://www.amazon.com/exec/obidos/ASIN/0823421538/readingrocket-20>

The Vegetables We Eat

By Gail Gibbons



Glossy red peppers, lush leafy greens, plump orange pumpkins, and delectable little peas: vegetables come in many shapes, sizes, and colors. This lush picture book introduces kids to the eight different kinds of vegetables, how to plant the different varieties, and what parts are good to eat. (Ages 4-8)

- [Purchase book](#)(<http://www.amazon.com/exec/obidos/ASIN/0823421538/readingrocket-20>)
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Comments

Good way to introduce the classification system in the school library!

Submitted by Anonymous (not verified) on September 2, 2012 - 12:04pm

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Reading Rockets is a national multimedia project that offers a wealth of research-based reading strategies, lessons, and activities designed to help young children learn how to read and read better. Our reading resources assist parents, teachers, and other educators in helping struggling readers build fluency, vocabulary, and comprehension skills.

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"You may have tangible wealth untold. Caskets of jewels and coffers of gold. Richer than I you can never be — I had a mother who read to me." — Strickland Gillilan