Building

Adventures in Reading:

Family Literacy Bags from Reading Rockets

Contents:

- Two books - one fiction, one nonfiction
- Parent information sheet
- Three activity sheets
- Bookmark
- Parent survey

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the Park Foundation, Inc.

for teachers and librarians

This Reading Rockets Activity Packet is designed to support reading activities at home. We've chosen a fiction and nonfiction book about building, appropriate for a first or second grade listening level, and included related activities to encourage some hands-on fun and learning. Just assemble the packet in a two gallon zip top bag, and send home with your students.

Reading Rockets carefully chose books that are widely available and appealing to young readers. The titles selected should be available in your school library. If the two featured titles are not available, or you prefer another title, feel free to substitute books related to the theme. You'll find a list of suggested alternative titles included in the bookmark.

The featured books are *Roberto: The Insect Architect* by Nina Laden and *Construction Zone* with photographs by Richard Sobol, text by Cheryl Willis Hudson. *Roberto: The Insect Architect* tells the story of Roberto, a young termite who dreams of building with boards rather than eating them. When no one is willing to give Roberto a chance in the big city, he turns his attention to helping others, building homes anonymously for dispossessed insects. In *Construction Zone*, noted photojournalist Richard Sobol uses photographs to help explain the complex and challenging process of building a building. The building readers are introduced to is the Massachusetts Institute of Technology's Stata Center, designed by architect Frank O. Gehry.

The parent information sheet includes an introductory note that you can personalize instructions about how to use the packet, and tips for sharing fiction and nonfiction books with children.

The activities are designed to encourage further exploration and learning at home:

- >> Creativity Activity: a hands-on craft project
- >> Imagination Activity: encourages imaginative play, writing, or drawing
- >> Get real Activity: focuses on real-world experiences for parent and child
- >> The bookmark lists both the featured titles and additional titles

Putting it all together

Print out copies of the parent information sheet, the activities, the survey, and a master for making bookmarks. Cut the bookmark page into strips. You may wish to print the activity pages and bookmark on card stock for durability.

Into a two-gallon zip top bag, place:

- >> Two books — one fiction and one nonfiction
- >> Parent information sheet
- >> Three themed activity pages
- >> Bookmark
- >> Survey for parents

Send the packet home with your student. Encourage parents to keep the parent information sheet, the activities, and bookmark, and return the books and survey to you.

Let reading rockets know what you think of the family activity packets by e-mailing us through our website: www.readingrockets.org/sitecontact. Click on "Family Literacy Bags"

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ADVENTURES IN READING!

Welcome

Dear ____

Exploring new ideas and enjoying books with you sends a powerful message to your child: Reading and learning are fun, and happen everywhere — not just at school. This Reading Rockets Activity Packet about building was created to help you and your child enjoy reading and learning together.

Start your learning adventure by reading some books with your child about this popular topic. Then explore the topic with three activities. Enclosed you'll find what you need:

- >> two books to share with your child
- >> three related activities
- >> bookmark with a list of other books to extend the fun, if you wish
- >> short survey to tell me if you enjoyed using the packet

The simple steps on the back explain how to use the packet.

The bookmark, this parent information sheet, and the activities are yours to keep.

When you've finished with the materials, please return the books and the completed survey to school in your child's backpack. Please return the Reading Rockets Activity Packet by ________________.

I hope you'll enjoy reading and learning together!

____

Teacher signature

To learn more about children's books, reading with your child, and information about helping kids become confident readers, please visit www.ReadingRockets.org

ADVENTURES IN READING!

Instructions

How to use your Reading Rockets Activity Packet

Getting ready

1. Before you read the books to your child, be sure to read them yourself. One book is fiction — a "make-believe" story. The other book is nonfiction, or informational and true. Reading the books first will give you the "inside scoop" to the twists and turns of the story, the interesting information inside, and the parts of the books that will appeal most to your child.

2. Next, read the three activities to see which of them you think your child will enjoy most, and which one you have the time and materials on-hand to do right away. Chances are, after you read one (or both) of the books with your child, he or she may want to do an activity right away.

Start the fun

3. When you know you'll have at least enough time to read and talk about one of the books, grab your child and a book, and dive right in. Start with the fiction selection. Talk about the cover of the book with your child — can he guess what it is about? Have they ever read a book by the same author or illustrator or about the same topic?

Read the book to your child. If you are using the fiction title, you will be sharing a make-believe story. As you read and explore the pictures, you should note to your child that the author may include real facts in fiction writing. Talk with your child about how to confirm factual information found in works of fiction. Then, try the nonfiction book or one of the activities.

4. When you read the nonfiction book, take a moment to explain to your child the difference between the two types of books. The fiction book told a made-up, make-believe story, and a nonfiction book focuses on real people, places, and things. The information in nonfiction books can answer lots of questions and confirm facts.

5. Feel free to pick and choose from the activities, or change them to suit your child's interests. Read the books again over the next few days and try different activities. Most important: have fun!

When you're done...

6. Keep the bookmark, the activities, and this page. Complete the survey and return it with the books to your child's school.

Make the most of the excitement the books create, and try some hands-on learning or make-believe fun. Exploring new ideas alongside you lets your child see you learning — and reading — too, and gives your child personal experiences to support her growing knowledge.

Tips for reading nonfiction books with kids:

>> *Wonder out loud. As you are reading, or afterward, talk about facts you find interesting or questions you have.*

>> *Show your child how to use the table of contents, section headings, index, and word list (glossary) to find the answer to a specific question.*

>> *Don't be afraid to jump around, reading pages that especially interest your child. You don't have to read a nonfiction book straight through.*

Tips for reading fiction books with kids:

>> *Take your time and talk about the story with your child. Ask your child questions.*

>> *Explore the pictures with your child.*

>> *Read with expression. Change your voice or how fast you read to create excitement. Ham it up!*

>> *You don't need to read every word.*

CREATIVE ACTIVITY : **BUILDING**

b

How do you stack up?

In ***Roberto: The Insect Architect,*** Roberto plays with his food (which happens to be wood since he is a termite) rather than eating it. Thanks to this experimentation, Roberto knows how to make the most of what he has available when it comes to building houses. Roberto designed his homes to meet some specific needs for certain homeless bugs. This craft activity has your child meet a design and building challenge.

Supplies

Raw materials for building. You can focus on food if you like, as Roberto initially does, or other found objects at home. Choose a category and offer your child at least two to four items to work with:

- Uncooked dried spaghetti or other tube-shaped pasta; marshmallows; pretzel sticks; fresh but firm fruits like blueberries, strawberries, or cut melon; graham crackers; sugar cubes; cream cheese; raisins; peanut butter
- Paper towel or toilet paper tubes; empty cereal boxes; clean take out containers; egg cartons; toothpicks; empty yogurt cups; clean milk or juice cartons; aluminum foil; dental floss; newspapers; coins

Tools. Scissors; butter knife; ruler

Plastic container with 100 pennies; small toy less than 2 inches high

Issue the Challenge

The structure has to be at least two feet tall, sturdy enough to support the weight of a plastic container with 100 pennies, and be built without using tape or glue. There also has to be a way for a toy figure that is two inches or less high to get inside the structure on the ground level.

You can also alter the challenge to limit raw materials used or exert different forces on the structure. Find additional challenges from ZOOM at pbskids.org/zoom/activities/sci/#structures.

Getting Started

Before building begins, encourage your child to think about and plan his building. Offer paper and pencil for sketching ideas or making a blueprint. You might also want to explain that even with planning, when he starts building, he may need to adjust his thinking if his structure doesn't stand up or fit together correctly, deconstruct and rebuild.

Forces at Work

The shape of things has a lot to do with the forces a structure can bear. Learn more about the science of forces and test them on shapes at www.pbs.org/wgbh/buildingbig/lab/shapes.html

While your child is building, talk about what goes on during construction and how it relates to his design and building efforts. Connect with what you've read in the books about laying a foundation, framing, structural supports, and creating a network of pipes and wires. You might also discuss the many different workers involved in planning, design, and safe building.

Put it to the test! Let your child place the pennies and insert the toy figure. Success? Congratulate your child and talk about why his design lived up to the challenge. You may want to focus on shape, material strength or load distribution. Use the same discussion points if he needs to head back to the drawing board and try again.

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Nature of Building

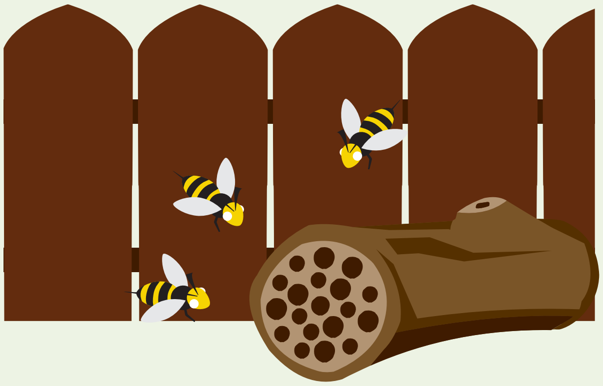
Nature is an excellent model for many architectural forms and shapes. Head outdoors with your child to observe the variety of systems, materials, processes, and structures found in nature that have applications in design and building. Some are large and obvious, such as how roots stabilize trees against wind and other forces. Others are less obvious, such as the design of a plant's leaves in helping deliver water to its roots. Discuss with your child how architects and builders can incorporate nature into structures for people.

People need structures to provide shelter from the elements of nature. Animals do too. Observe a bird, bug, squirrel or other animal and see if you can find its home. Does the animal take advantage of available materials to build a nest or does it burrow or dig in the earth for an underground abode?

Having trouble finding animal homes? Perhaps the creatures in your neighborhood need a place to stay!

Build a Bug Hotel

The idea of sheltering bugs may produce an "ick" reaction from your child. Explain that there are many bugs that are helpful to growing fruits, vegetables and flowers. Beneficial bugs that visit your bug hotel can pay for their stay by keeping other bugs from eating your garden. Some simple residences for bugs to spend the winter include:



>> A simple piece of untreated wood or log with holes a variety of holes drilled 3 ½ inches deep. Place near a fence or tree to attract bees, beetles and ladybugs.

>> Bees, beetles and ladybugs like long tunnels. Pack a cylinder, such as a 7 inch length of plastic pipe, with drinking straws. Close one end with duct tape, tie a string around the middle of the cylinder and hang in a tree that gets lots of sun.

>> With an empty 2-litre plastic bottle and 3 ¼ feet of corrugated cardboard, you can make a place for lacewings to rest. Cut off the bottom of the bottle. Roll up the corrugated cardboard and fit the roll inside the bottle. You want the cut edge of the bottle to be longer than the cardboard roll. Tie string or wire around the middle of the bottle and hang in a leafy spot by the end of August to catch those end-summer-customers!

>> Simplest of all is to create small piles of twigs or sticks in a warm, dry spot.

If you and your child are enthusiastic gardeners and builders with a large yard, you may want to build the Bug Mansion: www.wildaboutgardens.org/thingstodo/inaweekend/bug-mansion.aspx.

If you don't have a garden, your child could build a bug hotel for indoor insect observation. Provide your child with a clean glass jar. Add some dirt to cover the bottom, a few twigs, leaves and small rocks. Sprinkle a little water inside for moisture. Search outdoors with your child for a "guest" for the bug hotel. Remind your child while you search that this guest can only stay for a day and then needs to head back outside. Once the guest bug arrives, cover the jar opening with length of nylon stocking and secure it on the jar neck with a rubber band.

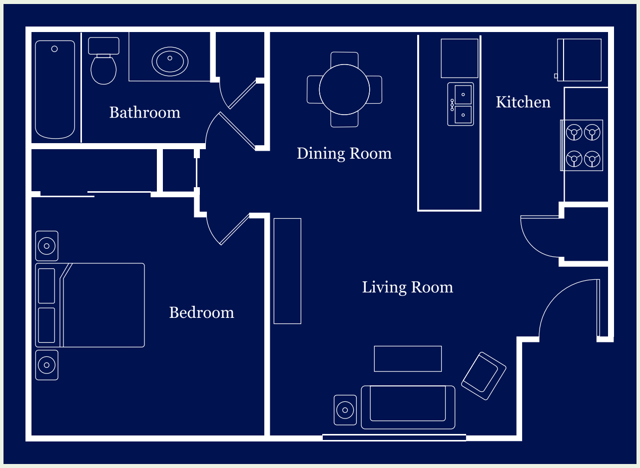
Building Stories

It's an architect's job to create a design for a structure that is safe, functional and looks pleasing.

But how does an architect know what elements he needs to include in his design? He asks lots of questions!

Ask your child to pretend that you are an architect and that he has hired you to design his dream home. Let him know that you are going to ask him questions about what he wants and needs in his new house and that there are no limits on size or expense. Some questions you might ask are:

- >> Where will the dream house be built? In the mountains, the city, near the ocean?
- >> What kinds of building materials do you like? Wood, brick, concrete?
- >> How many rooms do you want to have? What happens in these rooms?
- >> Does it have an upstairs? A basement? An elevator?
- >> What kind of furniture do you want? Are there special features like a swimming pool?



Write down his answers. Then hand the role of architect over to him. Provide him with pencil and paper to start drawing the floor plan for his dream house. Explain that a floor plan is like a map — you are looking at it with a bird's eye view. The floor plan shows the outside shape of the house and what's inside: walls, doors, windows, bathrooms and special features. Each room needs to be labeled. The answers to the earlier questions will help him with his design.

When the floor plan is finished, your child may want to build a model of his dream home or draw a picture of what the finished house looks like. You might also ask your child to tell you a story about how he would typically spend his day living in his dream house.

Variation: Although Architect Studio 3D was created with older children in mind and requires a fairly fast computer, you and your child could work together — with Frank Lloyd Wright as your guide — to design a house online: http://architectstudio3d.org/AS3d/design_studio.html

ADVENTURES IN READING!

Parent Survey

My child and I read books and did activities together about:

- ☐ Animals
- ☐ The environment
- ☐ Folktales
- ☐ Food
- ☐ Music
- ☐ Time
- ☐ Dinosaurs
- ☐ Sleep
- ☐ Green Eggs and Ham
- ☐ Where the Wild Things Are
- ☐ The Very Hungry Caterpillar
- ☐ Farms
- ☐ The Snowy Day
- ☐ The Lorax
- ☐ Rocks
- ☐ Oceans
- ☐ Cooking
- ☐ Weather
- ☐ Building
- ☐ Other ______________________

Tell us about your experience with the activities:

- ☐ Easy and fun to do
- ☐ The directions were difficult to understand
- ☐ My child enjoyed the activities

Did talking about what you were reading, and the activities help your child to learn? (on a scale of 1 to 5)

1 2 3 4 5

(did not learn much) *(learned a lot)*

Would you like to try another "read and learn together" activity with your child? yes ☐ no ☐

What kinds of things is your child interested in?

____

____

____

BUILDING

Featured titles

Fiction

Roberto: The Insect Architect
by Nina Laden

Nonfiction

Construction Zone with photographs by Richard Sobol, text by Cheryl Willis Hudson

Additional fiction titles

A House Is a House for Me
by Mary Ann Hoberman

Iggy Peck, Architect by Andrea Beaty

Let's Build a Clubhouse by Marilyn Singer

Palazzo Inverso by D.B. Johnson

The Three Little Pigs: An Architectural Tale
by Steven Guarnaccia

Additional nonfiction titles

Amazing Buildings (DK Readers, Level 2)
by Kate Hayden

Amazing Buildings by Philip Wilkinson

Building (Eyewitness Books)
by Philip Wilkinson

Building on Nature: The Life Of Antoni Gaudí
by Rachel Rodríguez

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