Flight

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

Funded in part by the Park Foundation, Inc.
This Reading Rockets Activity Packet is designed to support reading activities at home. We’ve chosen a fiction and nonfiction book about flight, appropriate for a third 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 *The Adventures of Sparrowboy* by Brian Pinkney and *Flying Machine* by Andrew Nahum. In *The Adventures of Sparrowboy*, a newspaper delivery boy named Henry has a unique encounter with a sparrow and the bird somehow transfers his power of flight to Henry. Like his favorite comic strip hero, Falconman, Henry uses his new power to defend the defenseless and also deliver his papers as he flies through the air. Though when he realizes that the sparrow’s gift has left the little bird defenseless, he gives back his power of flight. *Flying Machine*, an Eyewitness Book, offers detailed, full-color photographs and illustrations to explain man’s fascination with flight and efforts throughout history to achieve human flight. Readers also get the facts on the physics of flight and information about aviation pioneers.

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](http://www.readingrockets.org/sitecontact). Click on “Family Literacy Bags”
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 Flight 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
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.
Mankind has a long history of dreaming about human flight. Artists, inventors, and creative thinkers have drawn, built, and tested flying contraptions for centuries.

In *The Adventures of Sparrowboy*, Henry the paperboy gets the superpower of flight from his collision with a sparrow. His new ability to fly doesn’t involve a jet pack or wings though. Since running into a bird is not likely to result in helping a person fly, get your child thinking about what would. This design activity will give your child the opportunity to let his imagination soar as he creates his own flying apparatus.

**Supplies**

- Drawing supplies: paper, pencil, markers, ruler

**Getting started**

Ask your child to think about what you read together about the evolution of flying machines in the nonfiction book about flight. Discuss how designs changed over time — from human-carrying kites to jetliners. Now get him thinking about what is important to include in his own design of a one-passenger flight device.

Encourage him to be realistic in his design and drawing rather than fanciful. Explain to your child that as inventors came to understand more about the forces at work in flight, their designs were more successful. Knowing about these forces can help your child in his design too:

**Gravity:** The weight of an object is a measure of the force of gravity on that object. Since gravity holds objects down — toward Earth’s surface — in order to fly, we have to overcome the force of gravity. That makes the type of materials and weight of the flying machine an important factor.

**Lift:** Lift is what’s needed to overcome gravity. Lift is a mechanical force that is created when something solid moves through air. Without air or motion, there is no upward force of lift. On an airplane, the wings are designed to provide the lift, so wing shape is important to efficient flight.

**Thrust:** Thrust is the force that generates forward motion and pushes through the air. Jet engines and engines and propellers can provide thrust. Think about what’s needed to fuel engines.

**Drag:** When an object is pushed in one direction, there is always resistance of the air in the opposite direction — a force called drag. Drag can act like friction, so consider designs with materials and finished surfaces that reduce drag — that also reduces the amount of thrust needed.

Keep your nonfiction book handy in case your child needs inspiration. Suggest he brainstorm ideas and sketch before he produces his drawing. Encourage him to draw from multiple viewpoints, giving at least a front and side view of his machine. Have him explain his design to you. Ask which forces he kept in mind and how that affected his design.

**Design a plane**

Experiment with the forces of flight in air with this online interactive from the Smithsonian National Air and Space Museum:

http://howthingsfly.si.edu/activities/forces-flight
GET REAL ACTIVITY: **FLIGHT**

**wing it**

Early flight involved a lot of experimentation. While you and your child can’t use household items to build a craft to actually fly in, you can make test flights right in your living room or back yard with paper airplanes.

**Supplies**

- heavy paper
- drinking straw
- scissors and tape
- measuring tape or ruler and a timer or stopwatch

**Getting started**

There are many variations of the folded paper airplane. You and your child can work out your own way of folding paper or try following the instructional videos at www.paperairplanes.co.uk. Test lots of different styles and run trials to see which planes fly the highest, longest, and fastest.

Probably all the planes you and your child make have wings. Ask your child if he can remember any flying machines in the nonfiction book you read that didn’t have wings. What made these machines fly? Does he think that an airplane without wings could fly? Test his answer with this “loopy” model:

Cut two strips of heavy paper: one that measures 1x 5 inches and one that is 1x 10 inches. Form each strip into a circle, slightly overlapping the ends of the paper. Tape each loop closed. Take a drinking straw and lay one end of it in the middle of a piece of tape. Lay the end of the straw inside your larger loop and press the tape down so that the straw is secured. Repeat this with the smaller loop at the other end of the straw. Time to fly!

Was your child surprised that the loop plane could fly? Ask him why he thinks it can fly. Does it have something to do with the differences in the sizes of the loops and how the forces of flight act on this design? Have a competition between the loop plane and your other paper planes and talk about the differences in these designs. You can also experiment with the loop plane design. What happens if you add more loops or make it longer by taping straws together?

**Other ways to fly without leaving the ground**

- Try an online flight simulator
  www.aviation-for-kids.com/flight-simulators.html
- Watch the music videos for “Jet Pack” and “Flying” and dance along with Recess Monkey at
  www.recessmonkeytown.com
- You’ll get carried away with laughter with these jokes about flight
  http://pbskids.org/wayback/flight/jokespace.html

Adventures in Reading: *Family Literacy Bags from Reading Rockets*
Even if your child has never been on an airplane, air travel is an important part of his life. In this writing activity, your child will create a comic about living in a world without flight.

**Supplies**

- writing and drawing supplies—paper, pencil, markers, ruler
- the comics section from your local newspaper, comic books or access to online comics
- tracing paper (optional)

**Getting started**

Talk with your child about all the ways air travel affects him. Have him make a list of what is possible thanks to aviation, such as fresh fruits flown from distant countries or visits to relatives who live long distances away. Ask him to think too about how flight has affected lifestyles and culture. For example, if humans never took to the skies, would George Lucas have made *Star Wars*? Would there be more travel by train or boat?

With that list in mind, have your child start a new list that will help him shape his comic. Suggest headings where he can organize his thoughts about characters, their problems, the actions they take, and the setting. To help him focus, you may want to help him narrow ideas or devise a specific prompt, such as a favorite professional sports team missing an important away game because they couldn't fly there and had to travel by much slower means.

When he's ready to draw his comic, have him first create a six-panel grid on his paper. This is easy to do without measuring if he first folds the paper lengthwise and then in thirds. Unfold it and he will have six boxes to draw and write in. He may need more than one sheet depending on the length of his story. Some tips for helping his comic flow:

- The first panel can be for the title of the comic.
- Remind him that comics often have captions, written details that help explain a comic panel, included in a frame at the bottom or top of a panel.
- Your child can ask for help! Comics involve a lot of repetitive drawing. Tracing is allowed and you or a friend or family member can help with the comic.
- If a character is speaking in a panel, write what he's saying first and then draw the speech bubble around it. If your child draws a speech or thought bubble first, he may get frustrated if his words don't fit in it.
- Sometimes the best way to tell any story is in graphic form. Comics don't have to be funny.

When your child is ready to start filling in his comic panels, have him take a look at other comics and compare them to the artwork in *The Adventures of Sparrowboy*. For those illustrations, Brian Pinkney used a scratchboard technique. Scratchboard starts with white board covered with black paint. The white lines of his drawing appear when the paint is scratched away with a sharp tool. Colored paint can then be added to the white areas. Scratchboard is not a typical technique for comics. Often comics are drawn in pencil and finished in pen and ink. This technique will make it easy to photocopy your child's comic and share it with others!
ADVENTURES IN READING!
Parent Survey

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

☐ Animals  ☐ The Snowy Day
☐ The environment  ☐ The Lorax
☐ Folktales  ☐ Rocks
☐ Food  ☐ Oceans
☐ Music  ☐ Cooking
☐ Time  ☐ Weather
☐ Dinosaurs  ☐ Building
☐ Sleep  ☐ Bees
☐ Green Eggs and Ham  ☐ Rivers
☐ Where the Wild Things Are  ☐ Stars
☐ The Very Hungry Caterpillar  ☐ Flight
☐ Farms  ☐ 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?

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________
FLIGHT

Adventures in Reading:
Family Literacy Bags from Reading Rockets

Featured titles
Fiction
The Adventures of Sparrowboy by Brian Pinkney

Nonfiction
Flying Machine (Eyewitness Books) by Andrew Nahum

Additional fiction titles
Abuela by Arthur Dorros
Tar Beach by Faith Ringgold
The Wing Shop by Elvira Woodruff
Wings by Christopher Myers

Additional nonfiction titles
Flight by Ian Graham
Flight (Time-Life Books) by Donald S. Lopez
Flight (Eyewitness Books) by Andrew Nahum
The Smithsonian National Air and Space Museum Book of Flight by Judith E. Rinard

Recommended Readings:
www.ReadingRockets.org