



CURIOUS GEORGE: BLAST OFF!

Lesson Plan

During this lesson, children explore the following engineering concepts:

- Air power can be used to move objects.
- Engineers build and test different designs to determine which works best.

As children go through the activities, they will be using the following science skills:

- Asking questions
- Making predictions
- Planning and conducting experiments
- Testing and retesting

Materials

- ☐ “Space Monkey Blast Off!” handouts, folded in half
- ☐ Paper clips
- ☐ Scissors
- ☐ Straws (for each student: one wide, cut into thirds; one thinner straw, full length)
- ☐ Tape

Preparation

- Using the “Space Monkey Blast Off!” handout, build your own rocket so you can anticipate where and how children may need guidance.
- Arrange to have one or two assistants who can help children assemble their rockets.
- Be sure you have straws of two different diameters. The wider straw should fit smoothly over the narrower one.
- Cut out one *Curious George* rocket for each student ahead-of-time.

Directions

1. Watch the *Curious George* video, “Curious George’s Rocket Ride.”

Before students watch the video, ask them to notice what happens just before the launch of the rocket. What is special about the way the scientists count? You may want to preview vocabulary words such as *ignition*, *orbit*, *rocket*, and *International Space Station*.

2. Introduce the activity.

- Tell children they’ll be building a rocket that is powered by air.
- Invite them to name other things that also moved by air (e.g., kites, windmills, sailboats, leaves, flags, wind chimes).
- Ask for a volunteer to demonstrate how to launch the rocket, using one you’ve built ahead of time.

3. Build and launch rockets. [Note: Tell children to point their rockets away from people before launching.]

- Help students build their rockets, following the instructions on the handout (Steps 1 and 2).
- Ask students: *What makes your rocket launch? What happens if you blow hard into the straw? What if you blow gently? How can you make your rocket go higher? (Angle it upwards.) How can you make the rocket go far? (Launch it horizontally.)*
- As the students work, circulate to watch, listen, and engage children in conversations. If a rocket isn’t launching, check that the straw’s flattened end is tightly sealed with tape so that no air escapes.

4. Test and evaluate.

- Have students change their rocket designs by adding a paper clip to the top of it (Step 3).
- Have them test the rocket with and without the paper clip.
- Ask: *Which design flies the best? Why was testing important? What does testing help you discover about your rocket?*

Home-School Connection

You may want to distribute additional copies of the “Space Monkey Blast Off!” handout for children to take home and do with their families.

Extend with Games

“Blast Off!” at <http://pbskids.org/curiousgeorge/busyday/rocket/teacher.html> is a game specifically designed for a classroom whiteboard. The game, which is also available in Spanish, models counting backwards. As the whole class plays, they can count down to

zero. You may also want to invite children to play. For other *Curious George* whiteboard games, go to <http://pbskids.org/curiousgeorge/busyday/teachers.html>.

Students may also enjoy the counting game “Super Bouncy Blast Off” at http://pbskids.org/curiousgeorge/games/super_bouncy/super_bouncy.html.

Extend with Books

Encourage students to use these books as they continue to learn about rockets.

Curious George and the Rocket by H. A. Rey (Houghton Mifflin Harcourt 2001)
Curious George becomes the first space monkey!

Roaring Rockets by Tony Mitten (Kingfisher, 2000)
Join an animal crew as they launch into space.

Rockets and Spaceships by Karen Wallace (DK, 2011)
Photos and pictures explain the basics of space travel.



CURIOS GEORGE is a production of Imagine Entertainment, WGBH Boston, and Universal 1440 Entertainment, LLC. Executive producers are Ron Howard (Imagine), Brian Grazer (Imagine), Ellen Cockrill (Universal), Carol Greenwald (WGBH), Dorothea Gillim (WGBH), Jon Shapiro and David Kirschner. Curious George and related characters, created by Margret and H.A. Rey are copyrighted and trademarked by Houghton Mifflin Harcourt and used under license. Licensed by Universal Studios Licensing LLC. Television series: ©2013. Universal Studios. All Rights Reserved. The PBS KIDS logo is a registered mark of PBS and is used with permission. Proud Sponsors of Curious George® on PBS KIDS® are Stride Rite Children's Group, LLC., ABCmouse.com, and Houghton Mifflin Harcourt. FOR PROMOTIONAL USE ONLY.