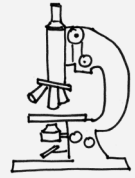




Wondernauts in Space

Wondering About the Present



Inventions Inspired by Space

Recommended for: Ages 6 and Up



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Scientists and engineers have invented all sorts of technology for exploring space. They don't just create super powerful telescopes and space shuttles, they also have to solve problems that will let people live and work in space. For example, figuring out how astronauts will sleep, eat, and wash their hands in space. Some of these inventions have made their way into our day-to-day lives on earth. NASA calls these inventions "spin-offs." Some "spin-offs" are camera phones, portable computers, athletic shoes, and invisible braces. In this activity, you will learn about how inventions for space have benefited people living on earth. You can also create your own invention to solve a problem.

You will Need

- Pencil and paper
- Recyclable materials or craft materials from around your house

(1) Explore

Technology and tools created for space can also solve problems on earth. Explore some of these "spin-offs."

- See how space exploration has impacted your day-to-day life using [NASA's interactive web app Home & City](#).
- Try [this clickable web app](#) to find solve the riddles and find "spin-offs."
- This [infographic](#) shows more examples of "spinoffs" created through space innovation!

(2) Listen or Read

Listen to Astronaut Kate Rubins read *Rosie Revere, Engineer* by Andrea Beaty during [Story Time from Space](#).

- What was this story about?
- How did Rosie feel when her Uncle Fred laughed out loud about what she created for him?
- What did Aunt Rose say to make Rosie feel better?
- What can you learn from Rosie Revere?
- Have you ever felt discouraged when something you wanted to make didn't turn out the way you wanted? What did you do next?

(3) Design

Now it's your turn to be an engineer! Anyone can come up with a space technology "spin-off!" You can invent something new. You can think of some new uses for the technology that was created for space exploration. You can even improve an invention's design to better fit your home or school.

Think about a problem in your home, school, or community. What might you design to solve that problem?

Before you start, think about:

- What problem are you trying to solve?
- Is there an invention that already exists to address this problem? Can you make changes to that invention to improve it?
- What will your invention do?
- Who should use it?
- When should it be used?
- How big is it? Is it heavy or is it lightweight?
- What is it made of?

Remember, it doesn't matter how practical or impractical your invention might be! Be creative!

(4) Sketch

Draw a picture of your new invention.

Write a description of your idea.

(5) Create

Make a prototype of your invention. A prototype is the very first try at making something new. A prototype is a sample or model that is usually made to test an idea. It helps the inventor to see what their idea will look like and how it might work. Just like *Rosie Revere, Engineer*, you can use recycled materials from around your house to create your prototype.

JEWES IN SPACE
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Wondernauts.org

Want to complete this task towards collecting a Wondernaut badge? Share with the Wondernaut community by doing one of the following:

- Tell us about your favorite space "spin-off" and why.
- Share your drawing of your invention. Tell us about it.
- Share a photo of your prototype. Tell us about it.