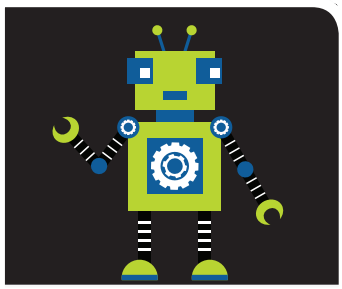
Robots at work



Robots are everywhere! The car or bus you ride in? A robot helped build it! That ice cream cone you enjoyed? A robot helped make it! At some point, robots have worked on almost everything we eat, wear or use. As you read and discuss books about robots, think and talk about the roles robots play in your own lives. Then get ready to look for evidence of robots around you.

Getting started

Ask your child to make a list of foods, toys or other things she uses every day. Then have her imagine how a robot was used in the creation of the items on her list. Talk about why she thinks that would be a good job for a robot to do or if she thinks a person could do it better. Have her note how she feels about having robots involved in making things that she uses.

To see how correct her ideas of how robots help make things are, take a look at video of factory robots in action at:

- http://manufacturing.stanford.edu
- www.robots.com/movies
- http://science.discovery.com/tv-shows/how-its-made (There is advertising on this site)
- http://science.discovery.com/video-topics/engineering-construction/factory-made.htm (There is advertising on this site)

Now that your child has had a chance to think about the kinds of tasks robots can do to make things in a factory, ask her what kinds things she would like a robot to do in your home. Get her thinking realistically by reminding her of the repetitive and precise jobs robots have. Ask her identify similar jobs at home — folding laundry, setting the table, etc. — and then have her create her own robots for specific tasks.

Have her create a description and illustration of each robot, including:

- A name for her invention
- What materials it is made of and details about its shape
- How it looks and how it moves
- What it can and can't do
- Any safety considerations
- What is required to keep it working well

As she brainstorms, remind her robots usually only have the parts they need to complete their task. Have her think about what parts of her body she uses to complete the task. What does her robot need to complete the task?

Extension:

When you're looking around the house at items worked on by a robot, take a look for things around that house that could also be useful in building a robot — motors, computer, etc.