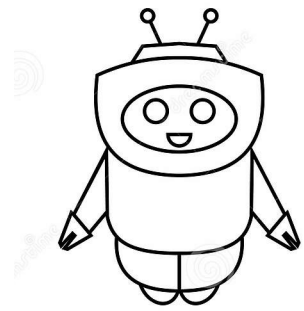


Be an Engineer: Build a Robot



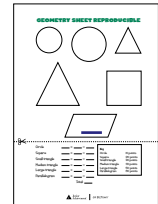
MATERIALS

- Blank paper sheets
- Scissors, glue sticks, crayons or markers
- Geometry Sheet

21ST-CENTURY CAREER

1. Become a mechanical engineer for a day and determine a problem or task for a robot-helper.

- Robots can often help the community by solving problems quickly and easily.
- The problem or task can be found at school or in the community.
- Tasks could include picking up trash, repairing play yard equipment, or cooking meals for the homeless.



2. Think about these details:

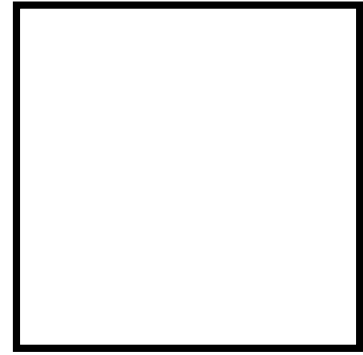
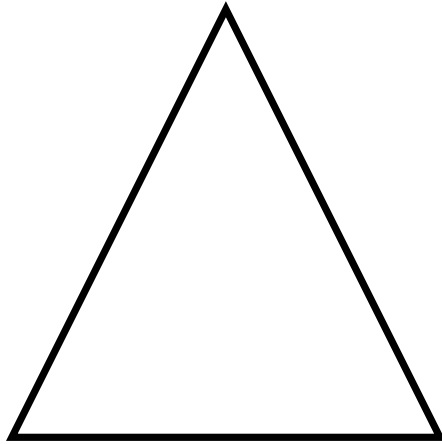
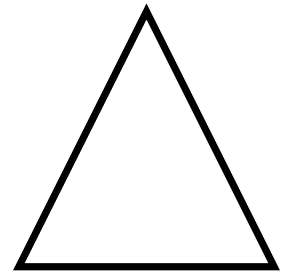
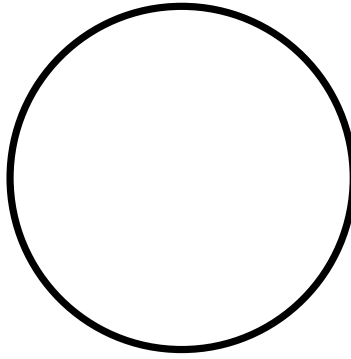
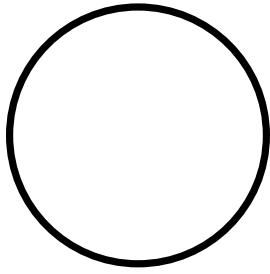
- What community problem will your robot help solve?
- How will your robot perform the task?
- What will your robot look like?
- When and where would you use your robot?

3. Construct a robot using the shapes found on the worksheet.

- Cut the shapes from the handout and trace them onto separate pieces of paper.
- Trace each shape as many times as you need to make your robot. Each shape should be used at least once.
- Cut out the new shapes to assemble your robot. Once you are satisfied with your design, you can glue the shapes to a new piece of paper.
- Name your robot and write a few sentences telling what he can do.
- Complete the math problems on the bottom of the worksheet.

GEOMETRY SHEET

Cut out, trace, and piece together a robot that will help solve a problem in your community.



Small circle _____ × _____ = _____

Medium circle _____ × _____ = _____

Square _____ × _____ = _____

Small triangle _____ × _____ = _____

Medium triangle _____ × _____ = _____

Parallelogram _____ × _____ = _____

Total: _____

Key

Small circle	10 points
Medium circle	20 points
Square	30 points
Small triangle	40 points
Medium triangle	50 points
Parallelogram	60 points

Mission accomplished!

Your robot may one day help people and businesses build a better world.