Introducing ENGINEER IT! Activities

What is an engineer?

Students may offer many partial or complete ideas, such as:

- engineers drive trains
- engineers build things
- engineers draw things to build
- engineers make things work

What do engineers make?

Students may suggest many possibilities such as buildings, cars, appliances, bridges, planes, etc.

The American Heritage dictionary definition of engineering is “the application of scientific and mathematical principles to practical ends, such as, the design, construction, and operation of efficient and economical structures, equipment, and systems.”

Work as a class, in groups, or individually to rewrite the definition of engineering to make it understandable for another class or for younger children. Encourage discussion of terms such as “practical” and “economical.” Have students write their definition on index cards, in their notebook, or on the board.

An example student definition of engineering is:
“To use science and math to design, build, and use something useful that works well and doesn’t cost too much time and money to make.”

Have you ever been an engineer? When?

Students may talk about building with Lego® blocks, designing a doll house, drawing a bridge, making a play structure from cardboard boxes, testing paper airplanes, etc.

Follow this discussion with any of the ENGINEER IT! classroom or museum field trip activities.