**FUTURE ENERGY SYSTEMS STORYTIME**

**SECRET ENGINEER: HOW EMILY ROEBLING BUILT THE BROOKLYN BRIDGE**

**GRADE 7 AND UP**

An engineer is someone who solves problems, like Emily Roebling. Engineers have jobs in many areas of work. Research two engineering jobs in the energy industry.

1.

2.

Emily Roebling became an engineer during a time with few other female engineers. Research two female engineers and what they do, one from now and one from the past.

Past:

Current:

**Now it is your turn to become an engineer.**

Step 1: Set a challenge for yourself. It could be: 1) build a bridge that spans 30cm between two chairs and holds the weight of a water bottle, 2) move a ball from the counter to a bucket on the floor without your hands, 3) anything else you want.

Step 2: Find materials to build your structure. Focus on materials from the recycling bin. Make sure you have permission to use the materials. You can also use tape, glue, scissors, and string.

Step 3: Design your structure. It is always important to have a plan before you start building.

Step 4: Build your first attempt and test it. Record what worked and what didn’t.

Successes:

Failures:

Step 5: Redesign your structure. Build and test again. Record what worked and what didn’t. Repeat as many times as needed until you successfully complete your challenge.

What did you learn from your experience?