

“Inventing is just plain fun!” - Leigh Estabrooks

Introduction: By this point, you’ve created your own invention tool kit, used it to solve real problems for real people, given and received feedback, and iterated on your invention prototype. This is exactly what an inventor does!

The final aspect of inventing is to identify your own problems worth solving. Many inventors consider this to be the most difficult part of the process, so don’t be dismayed if you find it challenging. Like all skills, you will improve with practice. Some problems are important to solve but too big in scale. For example, we can all agree that curing cancer is an important problem to solve, but it’s just too big! How would you even get started? Some problems are best solved through social or political solutions rather than technological inventions.

Goal: Create a list of new problems to add to the problem bank that you and other inventors can work on.

There are many different ways inventors go about identifying problems worth solving. Most of the time, inventors start by doing research. Below are some suggestions for where you can start:

- 1) Read the local news. Sometimes, you’ll find very specific, local needs you can do something about.
- 2) Interview a family member or friend. What needs do they have? Can any be addressed through technological invention? When you already have a relationship with someone, it is easier to develop empathy and understand their needs.
- 3) Start global to think local. Some inventors like to use the [UN Sustainable Development Goals](#) or the [Grand Challenges for Engineering](#), which list some of the major problems that humanity will need to address in the coming years. Can you identify ways to make these “big” problems specific and actionable?

Share: Post your list of problems for the problem bank on the [forum](#). Can you come up with 5 new problems to solve through technological invention? 10? 50?

Resources for Educators and Parents:

[Let’s Invent](#): NSTA article describing what makes for a good problem and describing extension activities to consider how to support the continued development of young inventors.