

# Tips for Inventors



This is when you need to identify the problem you want to solve. (This is sometimes the hardest step in the invention process!) Look around you - what problems exist at home, at school, or in your neighborhood? Talk to your friends and parents to see what frustrates them, and look at your local newspaper to learn about the issues and problems that people in your community are talking about. The best invention ideas often address problems that affect lots of people.



If you've identified a problem that affects many people around you, you're probably not the first inventor to try to solve it! Don't let this discourage you. Instead, do some research to learn how others have solved the problem. What do you like about their solutions? What do you think you can improve? And most importantly, how can your invention be different? Many inventions build and improve on ones that have come before.



Once you have a basic concept of what your invention will be, make some simple sketches of your idea. These do not have to be perfect or artistic. Sketches simply help you take the idea in your head and put it on paper. Sketches can help you think through not only what your invention will look like, but how it will work. You may want to make several sketches of your invention - from the front, side, looking down from above, or from the inside to show how it works. Be sure to label your sketches to explain how the various parts and pieces function.



For many inventors, this is the most fun part of the invention process! This is where you create a prototype, or model, of your invention. Using your sketches as a guide, you'll build your first prototype. Remember, this doesn't have to be perfect or even work! It's just the next step in the process and allows you to take your concept and put it into three-dimensional form. To build your model, try to use materials that you already have. Items from your recycling bin and scraps from other projects can be great resources.



Once you've got a model, it's time to test it out. You can try it out first, but then you'll want to have others test it too. Ask friends, teachers, parents, and neighbors to try your invention. What do they like? What suggestions do they have for making it better? Be sure to write down what they say about your invention so you have good notes for the next step of the process.



Using the feedback you got from the Try it step, identify ways you can improve your invention. Do you want to modify the design or change the materials it's made from? Do you want to add a new part to your invention, or take something away to make it simpler? Many inventors try and tweak and then try again to keep improving their idea until they get it just the way they want it!



Once you have your final invention idea, you want people to start using it! How will you convince others to use your invention? Design an ad or commercial to sell it. What problem does your invention solve? How is it different from other inventions? Who should use it? Answer these questions to explain why your invention is best!