

Inventor's Checklist



Inventing isn't just for students who love math and science — anyone can invent!

Think of a problem that you're passionate about and you might become the first person to invent a solution for it.



Brainstorming Problems and Solutions

- Identify a problem or a need, and begin to think about possible solutions to the problem. Think about what challenges or difficulties you or others face in your daily life, or what improvements you can make to existing products or systems.
- Brainstorm solutions using drawings, diagrams, or written descriptions.
- You can look for inspiration from books, magazines, websites, or other sources.
- Start your invention journal – a way for inventors to document their journey, even if they are inventing for a day!

Research and Exploration

- Research your ideas and check for existing inventions. Use the internet, library, or other resources to find out more about the problem or need you want to solve, and the potential solutions you have in mind. See if anyone else has already invented something similar to your idea, and how you can make yours different or better.
- Explore materials and resources available for creating prototypes.
- Conduct interviews or surveys to gather feedback and insights from peers or adults. Talk to people experiencing the problem.

Design and Planning

- Select the best idea for your invention and plan how to make it. Choose the idea that you think is most original, useful, and doable.
- Make a list of the materials, tools, and steps you will need to create your invention.
- Develop detailed drawings and plans for the invention. Consider your budget, if you need to purchase any supplies.

Prototyping and Building

- Gather necessary materials and tools for building the prototype.
- Follow the design plans to construct the prototype.
- Do not worry if your prototype is not perfect or complete, you can always improve it later.

Testing and Iterating

- Conduct testing of the prototype to identify strengths and weaknesses. Try out your invention and see how well it works. Does it solve the problem or need you intended? Does it have any flaws or limitations? How can you make it better?
- Seek feedback from peers and adults for improvements. Show your prototype to as many people as you can!
- Based on feedback and data, identify areas for improvement or further development. Iterate or modify the invention or consider the changes you would make if you had more time or money.
- If your testing fails, you are doing this right! Your invention may not be successful on the first try!

Presentation and Communication

- Prepare a presentation or a display that showcases your invention and explains its purpose, design, and benefits.
- Explore opportunities for participating in invention competitions or showcases.
- Create any visual aids needed. (Some invention events require posters, tri-fold boards, slide decks, etc.)
- Celebrate achievements and successes in the invention journey.
- Continue learning and exploring new ideas for future inventions.

inventEd

InventionEducation.org