

GUIDELINES FOR AN INVENTION (INNOVATION)

Think of a need that exists for people in general, or a person with a specific handicap. Think about a device that could make a certain difficult task easier. Think of an inconvenience that could be made easier with a simple device. For example, if you find yourself searching for your house key every morning, consider developing a homing beacon for it. You might want to look at specialty stores or catalogues for ideas for invention projects.

Once you have thought of your idea, plan out how to make it by writing your ideas into an “inventor’s notebook” (any small paper tablet will do). Draw your plans, measurements, and blueprints into this notebook. Every time you work on your project, you should summarize the things you did in the notebook. (Inventor Thomas Edison took very detailed notes on every step in the process of inventing the iridescent light bulb.) You should also list all materials you used and/or tried in the construction of your invention.

Next, build your invention out of sturdy materials that can be handled and operated by you and the Science Fair Judges. Your invention, **MUST WORK** at the time of the judging. Test your invention for “bugs” (things that prevent the invention from working right). You must also test the invention over and over to be sure it produces consistent actions. This is called reliability.

Finally, prepare your display for the invention. Please include:

- Need: Why you invented the device.
- Description: What it does. Use graphs, pictures, and visuals. Be thorough and concise.
- Procedure: Thoroughly describe step-by-step instructions on operating your invention. Before writing this down on the display board, test the instructions on a friend. Make sure they can follow the instructions by just **READING THEM**.
- List of Materials: Do not forget anything. Include what you tried and eventually used.
- Results: How it worked, what you changed, etc. Also who is going to use or benefit from your invention? How will it improve life, another idea, device or solves a problem? Your display should be flashy, as if you are trying to “sell” your invention to the public. Think of a catchy name, use slogans, eye-catching graphics, etc.

NOTE: The work in constructing the invention should be **YOURS**. Parents may help in constructing the object if one step in the process is too dangerous or involves dangerous tools. The danger in constructing your invention should be considered before starting it and eliminated through modification if possible.

