



Innovation Convention 2016

We are curious, creative, and concerned about our world. Knowledge allows us to solve problems, try various ways to make things better, and work with others to make an idea come to life. We can put our curiosity and knowledge together to create innovations that help us as individuals, our community or our world.

What is Invention/Innovation?

Many times things work as they are but could work better. Or there are ways to bring two or more things together for a new way to be used. Taking risks and sometimes even looking at failure as “fuel for innovation” can help the process of making new ideas work. If an idea does not work, we can learn from it, and then modify and try again. Inventions are innovations, many times they can be built or sometimes they are ideas or a process.

What are inventors and innovators like?

- Keep an open and curious mind about the world around them.
- Acquire as much information as possible about an idea, a problem, or a future invention before beginning to invent.
- Continually use trial and error as they engage in problem solving.
- Continually strive to improve upon an idea or design after finding a solution.
- Are dedicated, persistent, and most of all, optimistic about finding a solution.

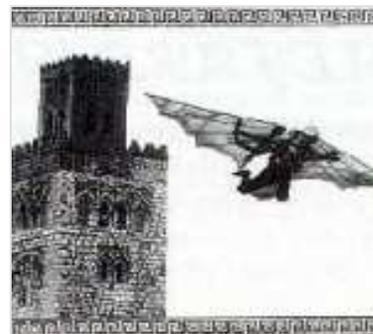
How does an inventor find ideas?

There are several ways to find ideas for inventions or for innovations.

- Ask people if there is anything they need.
- Brainstorm by yourself or with others: Name an object such as a lunch box. Take ten minutes to list everything you can that is wrong with lunch boxes. Next, find a way to correct some of the problems.
- Your ideas for solving the problems can be a big step toward inventing a new or improved product.

Keep in mind that your invention does not have to be a product. Instead, it can be a process for doing something. For example, it may be a better way of memorizing a list of objects, or a new card game. It can also be an app or website that provides a new service or way of connecting solutions to problems such as helping farmers get weather information for their crops on their phones.

In 9th Century Spain, Muslim inventor Abbas ibn Firnas designed a flying machine -- hundreds of years before da Vinci drew plans of his own.





Innovation Convention Steps

STEP 1: Finding an Idea-Brainstorm Identify problems, think about solutions, modify something to make it more effective, or combine ideas to create something new.

STEP 2: Research and Planning

- Research your problem and all possible solutions, use a variety of sources
- Create detailed plans of the invention process
- Plan out all the steps you will follow
- Make preliminary drawings
- List all the materials you will need.
- Define how you will test your innovation/invention/idea/process/app/website

STEP 3: Develop, Test, and Market

Develop:

- Build your invention/innovation, develop your process, or create an app or website.
- Decide whether or not you will produce a small model or a full-size prototype of your invention or innovation. For tech applications, provide a full and detailed description of what the application will do.

Test:

- Through trial and error determine if your idea works, if it needs modification or minor changes
- Record all data from trials and any modifications made in your Idea Journal

Market:

- Plan a strategy to market your product or idea
- Consider the potential customer
- Consider how to convince customers of the value of your idea
- Write and design advertisements for newspapers, magazines, television, and/or internet

STEP 4: Innovation Convention

Before the Innovation Convention, you will be given a number and a designated place to display your invention. When you set up your display, include your journal, test results, and invention.

You will be talking to judges about your work. Try to convince the judges that the world needs what you have invented. If you think a judge is missing the point of your invention or is not asking the right questions, speak up. Sometimes new ideas take a while to catch on and it is up to the innovator to be convincing!

The judges will judge your invention based on a predetermined set of criteria that includes your knowledge of what you have created and the way you have promoted it.

Please note: SHARK TANK option for grades 7-8- teachers will provide more information

Resources to Get You Started:

<http://inventionconvention.org/>

<http://www.vcstar.com/news/352682751.html?d=mobile>

<https://www.youtube.com/watch?v=xSLWOdAMglU>

https://www.eduplace.com/science/invention/resources/real_inventions.html

<https://blog.udemy.com/invention-convention-ideas/>

<http://www.leslienettling.com/nettlinginventionconvention.htm>

<http://www.1001inventions.com/media/video/library>

Innovation Convention: Judging

Idea Journal: Your journal is a place for you to keep track of your ideas, write notes about what worked and what didn't, and draw sketches to help you design and build your invention, record your data. Remember to date your entries. You will submit your journal along with your display board for judging. Do not include your name on or in your journal

Resources: Keep a record of all the sources (books, websites, people, etc.) you use as you work and do your research. Include these resources in your journal. Your teacher will give you more details about how to do this.

Display Board: The board should be able to stand up on its own. Have neat, clean, bold, colorful, large lettering. Be creative, visually appealing, colorful, and eye catching. Your display may include photographs and advertisements to show how it might better people's lives or convince people they need it. No faces may appear in your pictures so it remains anonymous.

- **Title:** Your invention's name in large, bold letters. Do not include your name on the board.
- **Inspiration/Problem:** How or why you came up with your idea. Include a statement of the goal or problem it solves.
- **Marketing/Purpose:** A description of how it is supposed to work and why it is useful or needed. Include a description of your target consumers.
- **Procedure:** A short summary of your inventing steps – what you did and how.
- **Materials:** A list of materials that you used.
- **Results:** What happened while testing your innovation/invention? Include data, charts, and graphs if possible.
- **Conclusion:** What did you learn, what could you do next?
- **Model:** An 8 1/2 X 11 inch diagram and 3-D model to represent the invention

Report: Your typed report must be written in paragraph form and include the following sections. Your report will be submitted to the judges along with your journal and display board. Remember not to put your name on the report, use your number.

- A title page with your assigned number, the date, your grade, and your title
- your inspiration/problem
- your marketing/purpose
- your procedure
- your materials
- your results including graphs, data, and charts
- your conclusion
- your list of resources
- any related drawings or diagrams



Innovation Convention Judging Form

Inventor # _____

Grade Level _____

Title of Invention _____ Judge # _____

Circle the Appropriate Rating

1. Does this invention have real-life application?

- 3 A unique idea that solves a real problems
- 2 Shows insight; addresses a real problem
- 1 Does not address a problem

2. How well has this inventor researched and planned his/her innovation?

- 3 Carefully researched/planned
- 2 Sufficiently researched/planned
- 1 Very little research/planning

3. How well has the inventor shown that the invention has been tested?

- 3 Provides evidence of hypothesizing, gathering data, analyzing data, and drawing conclusions
- 2 Has applied some scientific skills and processes
- 1 Shows no evidence of testing

4. How well is this invention designed and/or constructed?

- 3 Shows much attention to detail
- 2 Adequate design and/or construction
- 1 Poorly designed and/or construction

5. How well has the inventor articulated the conclusion for their work and for any potential next steps?

- 3 Clearly defined and interpreted end results and potential next steps for improvement
- 2 Adequately defined and interpreted end results
- 1 Poorly defined and interpreted or no end results

6. How creatively has the inventor displayed the invention?

- 3 Eye-catching, interesting creative presentation
- 2 Adequate presentation
- 1 Little or no effort to apparent in the display

7. How knowledgeable and enthusiastic is the inventor about the invention?

- 3 Able to converse at length about the invention and the processes involved in inventing it
- 2 Understands and can discuss invention
- 1 Is reluctant and / or unknowledgeable

8. How well does the idea journal record the inventor's ideas, process, data, etc?

- 3 Frequent, clear, dated, entries including ideas, details, data, and drawing/diagrams.
- 2 Somewhat regular entries with some ideas, details, data, and drawing/diagrams included.
- 1 Irregular entries, with little ideas, details, data, and drawings/diagrams included.

9. Report completed neatly, clearly, typed, and includes required sections?

- 1 Yes
- 0 No

Total Points: _____

Judge's recommendation for further development (on reverse)