

# Invention Connection

## How Inventions & Innovation Shape Our World Today

Grades 3-6 (5 book set w/project)

Why does it work? And how did it happen? Travel through time and take a peek at many life changing scientific and technological inventions past and present; the creation and introduction of brand new products and ideas designed to solve problems and the ongoing Innovations used to improve existing inventions by introducing new ways or ideas as our needs as a global society change.

**Books in this set:** Inventions in 30 Seconds, 50 Things you Should Know About Inventions, 50 Wacky Inventions Throughout History, 100 Steps for Science

**Learning Objectives:** Students will understand how inventions and innovations historically evolved based on the needs of society. Students will use a problem solving model to create a design, prototype and advertisement for a future invention or innovation.

### Essential Questions in This Unit:

- How does change impact our lives?
- What are inventions and how are they different from innovations?
- What drives the need for an invention or innovation?
- How did particular inventions develop?
- What is the process for inventing something?
- What are the most important inventions?
- How have inventions improved people's lives?

### Read to find out:

1. How have inventions and innovations impacted our society historically?
2. Explain how invention and innovation is based upon wants and needs.
3. How do inventors use problem solving to develop ideas into designs and models that satisfy a solution?
4. How do inventions and innovations affect society and the environment?
5. Why are inventions and innovations important in the future?
6. How have inventions improved people's lives?

7. Which factors influence or inspire inventors?
8. How are new inventions and innovations promoted?
9. How does technology affect the creation of a product and its advertisements?
10. How have inventors turned their ideas into realities?
11. Can anyone be an inventor or innovator?
12. How have inventions changed the world?
13. What is the greatest invention to date? Why?
14. How has it had a major impact on people's lives?
15. What drives people to create something different? Use a specific example from the text.
16. Describe how a modern invention brought about change in American and global communities.
17. How have inventions influenced how we live and the way we live over a period of time?
18. Identify and discuss major scientific discoveries and inventions, the scientists and inventors who developed them (e.g., Thomas Edison), and their impact on life today.
19. Distinguish between a want and a need. What are some inventions that we NEED? What are some inventions that were created based on WANTS?
20. Identify some of the major inventions in history along with their inventors.
21. Describe the development of transportation and communication networks
22. Explain the importance of technology in changing a community, (the railroad, automobile, telephone, electricity, etc.)
23. Discuss how inventors achieved success through their invention.

### **Activities**

Define key concepts and ethical responsibilities necessary for inventing, patenting, and marketing.

You are an inventor. Your job is to create an invention that will solve a specific problem which will make life easier for members of your community, your family or improve your life. Make a brochure of your invention to convince people to buy it or convince them that they need it.

- Document the process of inventing.
- Demonstrate the ability to develop, modify, and improve your inventions through experimentation, modification and interpretation of data.
- Research, using multiple resources, the marketability of your invention.
- Create a marketing strategy for your inventions.

Research three inventors. Create a presentation on some of the common character traits of inventors that you read about.

**Debate**-The changes that have taken place due to inventions can be viewed as both positive and negative depending on the viewer.

Organize inventions and innovation that have personally affected you on a timeline.

Compare and contrast a modern community with its predecessor.

Research the improvement or evolution of a specific invention.

**For more information on this topic, please refer to the books below:**

9781847808431	100 Steps for Science
9781682970201	50 Things You Should Know About Inventions
9781633222946	50 Wacky Inventions Throughout History
9781782404880	Know it All Inventions in 30 Seconds