

Invention is a Fun, Creative, Interdisciplinary Activity

by

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Reading/Language Arts

- Read biographies of famous inventors and write summaries of their lives:
 - Thomas Edison (lightbulb), Alexander Graham Bell (telephone), Eli Whitney (cotton gin), Mattie Knight (flat bottom paper bag), Mary Anderson (windshield wiper), Madam Walker (hair care products), Stephanie Kwolek (Kevlar), Maria Telkes (solar heated house), Gertrude Elion (drugs to fight childhood leukemia), Les Paul (electric guitar), or Steve Wozniak (personal computer).
- Research inventors in the National Inventors Hall of Fame. www.invent.org/
- Write a description of your invention or of another invention.
- Write step-by-step directions for building a model of your invention or of an invention you like.
- Name your invention five different ways.
- Write a letter to an inventor telling him or her of your opinion of the invention.

Math

- Use ratio and proportion to make scale drawings of your invention or an invention you like.
- Estimate the cost of marketing, building or patenting your invention.
- Make a model of your invention idea—measure, cut, form and construct it.

Science

- Pick any invention you use all the time and try to envision it twenty years in the future: how could it change? Be improved? (If you like this activity, check out the Exploravision program. [http://exploravision.com/.](http://exploravision.com/))
- Research inventions based in nature: Velcro, airplanes, glue.
- Trace the change of an invention over the years: the bicycle, pen, camera, phone, shoes.
- Make a list of as many things you could power with a AA battery. Then, build a model and use the battery for power.
- Explore the properties of various materials and how you could use them: Velcro, Bubblewrap®, duct tape, rubber bands, pvc pipe. Create a model of an invention using the materials.

Social Studies

- Compare things that were invented in different time periods: your lifetime, your parent's lifetime, your grandparent's lifetime. How did each invention change the lives of your family?
- Research the impact on society of several inventions—bicycle, airplane, the VCR, the tape recorder, the trampoline, the snowboard, the microwave, the laser or the personal computer.

The Arts: Drawing and Design

- Do a sketch of an invention
- Draw a comic strip telling the story of an inventor or an invention.
- Diagram and label all the parts of an invention. Do a Google Patents search for a type of invention—bicycles, ice cream cones etc.—then look at the patent images and try to recreate and label them.
- Look at and copy some of the drawings of ideas for inventions by Leonardo da Vinci or Thomas Edison.
- Design a package for your invention or an invention you like.

The Arts: Performing Arts/ Radio and Film

- Write and perform a rap, jingle or song that promotes your invention or one you like.
- Design and create a magazine, newspaper or web ad for your invention or an invention you like.
- Research inventions related to music. How did the inventions affect the sound, i.e. the electric guitar, the synthesizer.
- Write and present a sales pitch for your invention or one you like.
- Produce a 30-60 radio ad for your invention or an invention you like.
- Produce a commercial or infomercial about your invention or an invention you like.

Business Education

- Do a survey asking people their opinion about your invention.
- Find out how you would go about manufacturing your invention or licensing it to a company.