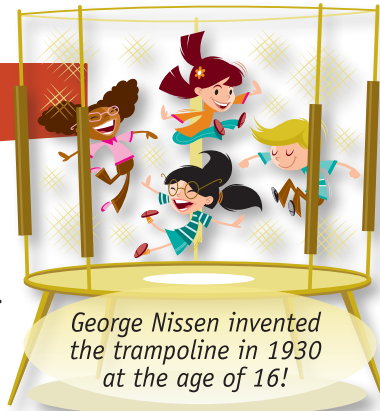


SCIENCE | TECHNOLOGY | ENGINEERING | MATH

This special Newspaper In Education feature is brought to you by the St. Louis American Foundation, the Missouri Press Foundation and this newspaper.

Growing future scientists, technologists, engineers, and mathematicians with the newspaper!

What Is An Inventor?



Each day, you are bombarded with advertisements and pressured to buy items that will make your life easier. Have you ever wondered who creates these products? Where did they get their ideas and inspiration? If so, you have the mind of an inventor.

The first step to becoming an inventor is to keep an inventor's notebook. Record your ideas and thoughts. Ask questions like why? What if? A good way to practice your invention skills is to use common items you find at home and school, such as a paper clip, or a plastic cup. What other uses could they serve? It's fun to try this with your friends and

see all the different possibilities. Don't be afraid to make mistakes; they are the best way to learn. Next, think of items in your community that can be used in different ways. Think of "problems" you have each day—does it take too long to complete your chores? Is it difficult to get ready for school in the mornings? What inventions can you create to help solve these problems?

To learn more about inventors and inventions, check out these books:

"Girls Think of Everything: Stories of Ingenious Inventions by Women," by Catherine Thimmesh and Melissa Sweet
"The Kid Who Invented the Popsicle: And Other Surprising Stories about Inventions," by Don L. Wulffson

"Mistakes That Worked," by Charlotte Jones and John Obrien

"Kids Inventing! A Handbook for Young Inventors," by Susan Casey
Learning Standards: Use nonfiction text to find details to support your inferences. CCS.ELA-LiteracyCCRA.R.2, CCS.ELA-Literacy.CCRA.L.6

Extra! Read All About It!

Use the newspaper to practice your skills.

- 1 Find an item in the newspaper. Research who invented it and how it was created. How has this invention helped society?
- 2 Inventors understand cause and effect. Think of this common scenario. A student oversleeps and misses the school bus. The cause is the fact the student overslept. The effect (result) is that the student misses the school bus. Use the newspaper to find an example of cause and effect.



Learning Standards: Use nonfiction text to locate specific information. Add, subtract, and multiply for real-life application. CCSS.ELA-Literacy.CCRA.W.4, CCSS.ELA-Literacy.CCRA.R.2

Become A Mad Scientist!

In this experiment, you will invent a device that can catch an egg that is dropped from 3 feet without cracking the egg. You will need to work with a group to plan a strategy, sketch a design for your device, and create the device. Are you up for the challenge?

Materials Needed: Each group will be given one egg, 10 pieces of notebook paper, and 1 foot of masking tape.

Goal: Your group will create a device using only the paper and tape that will safely catch an egg that is dropped from a height of 3 feet.

Process: You have only 20 minutes! You will need to discuss a strategy with your group, sketch a quick design, and create



your device. At the end of 20 minutes, each group will test its design by dropping an egg from the height of 3 feet.

Evaluate: After all designs have been tested, discuss what worked and what didn't? What

can you learn from this process? What other invention challenges can you create?

Learning Standards: I can follow instructions to complete an experiment. CCSS.ELA-Literacy.CCRA.R.1

Go Figure!

Inventors are excellent problem solvers. Did you know that math is a great opportunity to sharpen your problem solving skills? Here are six techniques you can use to solve a math problem:

- 1 Draw a picture
- 2 Look for a pattern
- 3 Guess and check
- 4 Make a list
- 5 Logical reasoning
- 6 Work backwards

To learn more, visit: <http://www.thesingaporemaths.com/stratf.html>

Use these techniques as you solve the following math problem. State which technique you used and how it helped you solve the problem.

Your favorite uncle gives you \$50 for your birthday. You want to spend every penny of it! You have your eye on several things: movie passes for \$12.50, arcade passes for \$15, theme park passes for \$23.75, and a new T-shirt for \$18. What items will you buy and come as close as possible to spending all of the \$50? Compare your results with your classmates. Who came the closest to spending all \$50?

Learning Standards: I can use numbers to add, subtract, multiply, and divide to solve problems. CCSS.MathContent.3.OA.A3

