Inventors and Inventions



Thomas Edison

W/C: 20th April 2020

This week, we are going to be focusing on inventors and inventions that changed the world. In Year 2, our focus will be in Thomas Edison, an American inventor who has had a huge impact on the way we live today.

Subject: History/ Reading comprehension

Activity Outcome: To gather knowledge of a significant individual who has contributed to global achievements.

Explain:

Read the information about Thomas Edison (Page 2 and 3 of this document) and extract the answers to the questions (on page 4) to research Thomas Edison and his inventions.

The internet is full of wonderful facts about Thomas Edison if you would like to know more!

Subject: History

Activity Outcome: To name inventions by Edison that we still use versions of today.

Explain:

Use google to research Edison inventions. Choose 1 of the following.

- Phonograph
- Lightbulb
- Kinetoscope/Kinetograph (Motion pictures)

Write a short explanation of what the invention is.

Now, write a list of all the things that we might not have today or be able to do if Edison had not invented that item.

Subject: Science

Edison was really interested in Electricity. These activities are science experiments that involve a type of electricity called static electricity.

Go to page 5 of this document to find the instructions for the experiments. (Static Science).

Before you start each experiment, talk through what you think will happen and make a prediction.

When you've finished, come back to your prediction... were you correct?

Could you change the experiments slightly to make your own and test your own ideas?

I wonder what would happen if......

Subject: Computing

Activity Outcome: Using modern technology

inspired by Thomas Edison

Explain: We have movies today because of inventions like Thomas Edison's Kinetograph.

Use a video camera or video on a mobile device/tablet to make your own short movie.

This could be:

A presentation about Thomas Edison

A video message for friends/family/staff/key workers.

A whole dramatic movie that tells a story.

Plan your film first so that you know what you want to do! You could use the storyboard on page 6 to make notes/draw plans or create your own.

You could even email me your movies if you want to! My email: j.lacey@feathstn.bham.sch.uk

Thomas Edison

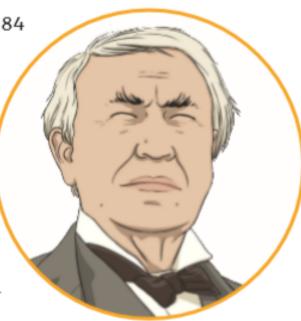
Born: 11th February, 1847

Died: 18th October, 1931 aged 84

Childhood

Thomas Edison was born in America

He had hearing problems from having an illness called scarlet fever when he was young. His mother was a teacher, so he did not go to school but was taught at home.



Getting a Job

He got his first job by accident. He saved a 3 year-old boy from being hit by a train, and the boy's father was so thankful, he gave Thomas a job as a telegraph operator.

A **telegraph operator**: a person who operates a telephone switchboard.

At 19 years old, Thomas got a new job. He worked at night so that he could do his experiments. One night he spilt sulphuric acid on the floor and it dripped through the wooden floor boards onto the desk of his boss below. Thomas Edison lost his job!

First Invention

Thomas Edison's first invention was finished in 1877 – the phonograph. This was a machine that could record and replay sound. The sound was played through a large horn.

Suddenly, Thomas Edison became famous.

Thomas Edison

An Amazing Man

Thomas Edison was a very careful worker. He thought hard about all the different things that could go wrong and how to put things right.



The Electric Lightbulb

Thomas wanted to invent a light that did not need oils or gas to be lit. Edison created a lightbulb that would stay lit using electricity for $13\frac{1}{2}$ hours!

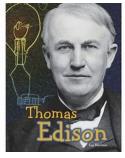
His Legacy

Thomas Edison died in 1931; he was 84 years old. Almost everyone in the world has used at least one of his inventions: the electric lightbulb. We are still using them today, almost 100 years later!

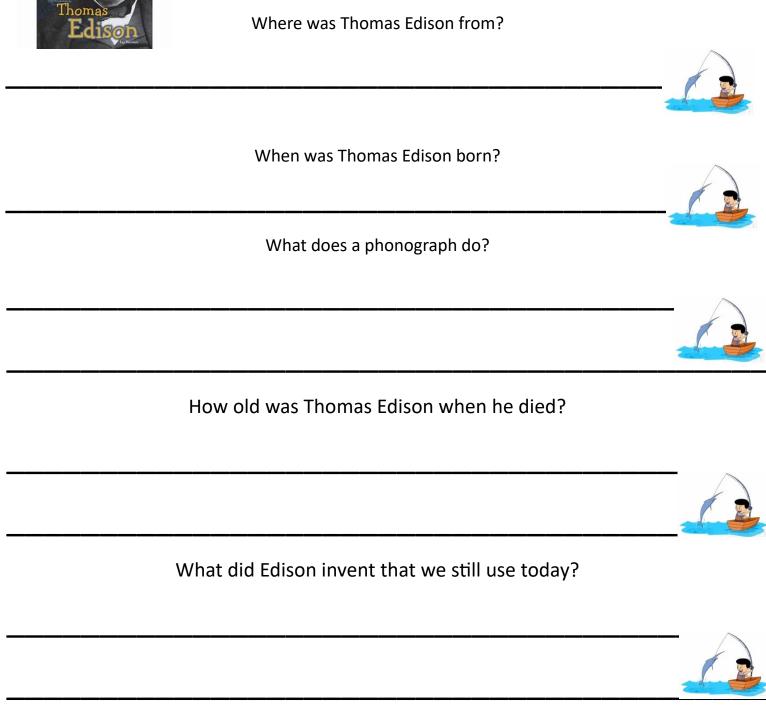


Edison with his phonograph invention.

Reading Comprehension: Thomas Edison



Post read activity



Static Science Experiment 1: The pepper mystery.

You will need:

A balloon

Some pepper

A piece of paper

Method



- **Step 1.** First, blow up the balloon.
- **Step 2.**Then, sprinkle pepper on the A4 paper.

Optional: Put the balloon about an inch above the pepper. Observe what happens.

- **Step 3.** Next, rub the balloon on clothing that's made of wool or nylon.
- Step 4. Finally, put the balloon over the pepper. Watch as it jumps up! If you are quiet you Might even hear it hiss!

For more information please visit: https://www.gallykids.com/static-electricity-experiment-balloons

Experiment 2: The flying butterfly.

You will need:

A balloon

Some lightweight paper (Like tissue paper)

2 sheets of Carboard or thicker paper.

Glue

Scissors

Your head!

Method

- **Step 1.** First, blow up the balloon.
- Step 2. Then, make tissue paper butterfly wings. Add as much detail as you wish,
- **Step 3.** Now cut a butterfly body out of your heavier paper. Place the wings on to the second Sheet of cardboard and use stick down the butterfly body over the top so that it traps the centre of the wings. (Do not stick the wings themselves!).
- **Step 4.** Rub the balloon on your head! (Or something made of wool/nylon).
- **Step 5.** Put the balloon over your butterfly! Watch it's wings flap towards the balloon.



