

Key Stage 2 & 3	Created by InspirEd Workshops - Film & Animation Specialists. Book a workshop to support this lesson plan. www.inspiredworkshops.co.uk/bicschool
Curriculum Subjects	Art & Design Science History 
Learning Objectives	Lesson 1 - Design a magical device for an end user. (See Promote a magical device for lesson 2)
Materials	BIC KIDS PLASTIDECOR colouring crayons. BIC Kids Visa Felt Tip The attached worksheets. Plain paper  
Teacher Prep	
<p>What are the life changing inventions from the past 100 years? Prepare a few images of famous examples to use in a class discussion. Search 'top 10 inventions, last 100yrs' online or you can use the examples on the worksheet. Print out the worksheets. The pupils can work on their own or in groups.</p>	
Lesson	
<p>Class discussion - Life changing inventions. Introduce the pupils to the lesson by showing them 3 inventions from the past 100 years. Some good examples would be the invention of motor powered flight by the Wright Brothers, the television set by John Logie Baird and the mobile phone by Martin Cooper.</p> <p>Worksheet - See a need, fill a need. Explain that most successful inventions fulfil some sort of need. The consumer/customer is the end user of the invention. The device/product needs to enable them to do something better, solve a problem or help them in some way. Ask the pupils to fill out the worksheet with this in mind. Advanced Difficulty - Research the dates and inventors of the devices on the worksheet. The answers are below. TV - John Logie Baird was one of the inventors of the mechanical television. He demonstrated the first working television system on 26 January 1926. Radar - Heinrich Hertz discovered that radio waves could be bounced off objects in 1888. Motor Car - Karl Benz, 1807 Stethoscope - René Laennec, 1819</p> <p>Market research questionnaire. Ask the pupils to think of someone who they can create a helpful device/product for. This person will be the end user. The invention should be something that will solve a problem or help them in some way. Complete the questionnaire by writing three questions for the end user to answer. The aim is to try and establish a need for a new product or device that will help make a tedious task better.</p> <p>Focus group discussion. Separate the class into small focus groups and ask them to discuss their findings. Are there any similarities between the end user's answers? What is there a need for? Is there a problem that an invention could help with?</p> <p>Design a device that will help someone. Draw a device or product that will help make a boring or difficult task easier. The device can be magical. BIC KIDS PLASTIDECOR colouring crayons will help make the illustration bright and colourful.</p>	
Learning Outcomes	Create an illustration of a fictional device/product using market research. The invention will need to solve a problem or fulfil a need.
Follow on Activities	Complete a SWOT analysis about the new invention to establish it's strength and weaknesses. You can also do a PEST analysis to research the inventions political, economic, social and technological impact. Create the invention using art supplies. See 'Promote a magical device' lesson plan to create an advert for the invention.

A successful invention must have a purpose. Answer the questions below.

1. Why was the device created?

2. What does it do?

3. How has it changed the world we live in?

Advanced Difficulty.

Research the below answers on the internet.

1.



Television

2.

3.

Date invented:

Invented by:

1.



Radar

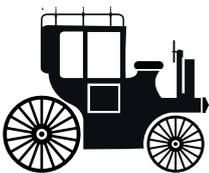
2.

3.

Date invented:

Invented by:

1.



Motor Car

2.

3.

Date invented:

Invented by:

1.



Stethoscope

2.

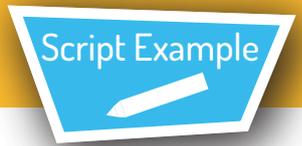
3.

Date invented:

Invented by:



Invent A Magical Device



Before you design a new invention you will need to research the market to establish a 'need'. Create a set of questions that will help you understand your customer/end user about an activity they dislike. Your invention should be something that will make their lives easier and help them in some way. **RED sections to be answered by the end user only.**

Market Research Questionnaire

Age.

Gender.

Write a sentence about yourself.

Write 3 questions to try and establish how you can help the end user enjoy an activity they do not like to do.

Question 1.

Question 2.

Question 3.

Answers