



## YEAR 7

# DESIGN AND TECHNOLOGY INDEPENDENT LEARNING TASK

*You have two weeks to complete these tasks.*

AIM OF TASKS: When you have completed this Independent Learning Task booklet that you have been set, you should all have RESEARCHED TORCHES, what they are and how they are used. Most of you will be able to question other people (not your classmates) about torches and some of you will be able to evaluate the range of torches found.

Please complete all the work neatly on paper (you can use a computer), start each section on a new page and hand it in presented neatly in a folder with your name and Technology group on the front.

Return this booklet to your teacher at the time of handing in your work.

Please bring in your ILT to your Technology lessons so that we can check how you are doing and you can ask for help if you need it.

Have fun, be creative and see what you can find out.

## **Task 1: Description What is a torch?**



- Describe what a torch is and what it can be used for and how the shape has changed over a period of time.
- What fuel was used to power torches before batteries were invented?

## **Task 2: Product Research**

- Research torches, cut out pictures of torches (Minimum 6 pictures) and stick them down or copy and paste images.
- Add a few notes about the torches where possible e.g. what materials are they made from, what size are they, how much do they cost, when do you think they might be used?
- Say where your resources are from (e.g. Argos catalogue, [technologystudent.com](http://technologystudent.com) or a web address)

## **Task 3: Construction**

- Find a torch at home.
- Open it up to see how it works (get adult help here) and draw a picture of it showing all the different component parts.
- Label as many parts as you can and the materials used.

#### **Task 4: Market Research**

- Ask 10 people questions about the usage of their torches, the brand names, how much they cost and how often they use them.
- Try and make sure your questions do not have open ended answers.
- Produce your answers in the form of pie graphs or bar charts.

**Extension:** Write a conclusion of your research (what did you find out, what surprised you or interested you?) and evaluate your ILT.

- List all the sections in the order given and only include the words of the headings shown here for each task.
- Show the page numbers aligned vertically on the right and the section numbers on the left.
- List all sources of information at the bottom of the page.

## **ASSESSMENT CRITERIA**

### **To gain a good Level 3;**

#### **Developing Ideas**

You will have collected some information to help your understanding.  
You will have used your research to help you evaluate.

#### **Communicating Ideas**

You will be able to criticise your own ideas.

#### **Planning**

You can write your labels clearly and accurately around your diagram.

#### **Evaluation**

You can explain the plus points, minus points and improvements you would make to your design.

### **To gain a good Level 4;**

#### **Developing Ideas**

You have collected some information to help your designing.  
You have asked the type of people who will use this product their opinions.

You have used your research to help you design your product.

#### **Communicating Ideas**

Criticise your own design ideas.

Think about plus points, minus points and improvements.

#### **Planning**

You can write a step-by-step plan.

You can name the tools and processes.

#### **Evaluation**

You can explain the plus points, minus points and improvements, you would make to your product.

You can draw or model the new improved design.

## To gain a good Level 5;

### **Developing Ideas**

You have used more than three different sources to find information on similar existing products.

Your ideas have been explained using drawings and detailed notes that refer to your research.

### **Communicating Ideas**

Criticise your design ideas then change them and show the improvements you could make.

### **Planning**

You can modify your step-by-step plan as you go along and show changes that you have made.

### **Evaluation**

You have tested your prototype and used it in the situation it has been designed for.

