



# Lesson Activity Sheet

School: .....

Date: .....

Class size: .....

Year group: .....



Application used: 'The Elements', iPad Photos and Numbers

Resources: 15 ipad minis, interactive whiteboard

## Topic: Handling Information - The Elements

### Overview:

Students are introduced to a fantastic app called 'The Elements' where they learn about the periodic table, how a database is used in real life (like an app) and how to search for and organise information.

### Week 6

### Learning Objective/s:

1. To understand what the periodic table of the elements is.
2. To be able to search a database for specific information
3. To be able to record and organise data using the 'photos' app
4. Some children will work on extracting data and comparing using a spreadsheet. e.g. melting point

### Learning Outcome:

Each child will have created albums to store specific types of elements. More able children will have started to produce a spreadsheets to record data about the melting points of different metals and produced a graph.

## LESSON OUTLINE

### Starter input/activity (10 mins)

Using the interactive whiteboard, PLAY THE SONG and explain what the table shows! Teacher to show the basics of selecting an element and the detail pages that follows..spin the elements round etc.

Series of short challenges...who can find GOLD and hold it up. Who will be the first to find OXYGEN and hold it up and finally who can find mercury and hold it up.

### Short discussion (5 mins)

Teacher lead discussion. Ask the students how they went about searching for the element they were asked for? Did they scan the little pics on the home page or did they use the search bar?!

## Activity (using the search bar)

Teacher to lead another round of short tasks.

1. Who can find the melting point of copper?
2. Who can find the ATOMIC RADIUS of Helium?
3. Who can tell me something made of Mercury?

## Short discussion (5 mins)

Did you know that the Elements app is an example of a searchable database. Instead of just being a boring list, the app organises all the data in a pleasing way using graphics and allows us to search for what we want using a simple search bar.

## Activity (Extracting and organising data)

Now the children are going to have a go at capturing data using screenshots and organising the data into albums in the photo app.

Teacher to show on the whiteboard how to do screen shots, how to make an album, and how to add the screen shots to it.

Tasks:

1. Find all the 'Noble Gases', screenshot each one and put them in an album called Nobel Gases.
2. Find 6 different metals, screenshot them and put them in an album.

## Plenary/Reinforcement (5-10 mins at the end)

Recap on learning objectives and ask pupils who would like to have a go on the teachers (whiteboard iPad ) to show the class how to complete a range of quick tasks...eg turning text blue or making a column wider.

It is important to gauge the level of learning that has taken place across the whole class and so to that end it is often appropriate to have a show of hands for each learning objective. Pupils can show 1 to 5 fingers indicating how well they feel they grasped each concept or learning objective. Alternatively, you can use a simple sketch app to turn the iPad into a mini whiteboard that they can hold up with a number drawn on.

## Differentiation and Extension

If students are moving quickly then they can make a spreadsheet to record the melting points of the 6 metals that they have collected. Able students may even be able to produce a bar graph of the melting points.

Less able children may like to continue collecting data and making albums for different categories of elements.

## National Curriculum:

1. Handling Information
2. Recording and entering data
3. Manipulating and displaying data

