

# The Periodic Table

## Lesson 4 - Metals and Non-metals

Science

Chemistry - Key Stage 3

Miss Willett



# **What have you learnt already?**

- 1. Where are metals on the periodic table?**
- 2. Who developed the modern periodic table?**
- 3. What is an element?**



# Properties of metals

**Q1) Add definitions for the following:**

- Malleable
- Ductile
- Sonorous



# Properties of metals and non-metals

*Ductile, low density, dull, shiny, brittle, malleable, insulator, conductive, sonorous, low melting points*

**Complete the table:**

<b>Metals:</b>	<b>Non-metals:</b>



# Which metal would you use?

*Think about: appearance, conductivity, is it ductile / malleable?*

Q1) Explain what you would use **gold** or **copper** for:

-jewellery

-electrical wires



## True or false?

A mathematical relationship could be 'double', 'half', '3x as much'

If you write in bullet points, you'll NEVER get full marks

If it is a 6 mark answer, you need 6 sentences



# Evaluating data

**Q1) From which material would you make a bell?**

<b>Material</b>	Gold	Tin
<b>Cost</b>	£3.000 a bell	£2,300 a bell
<b>How long will it last?</b>	3 years	12 years
<b>How malleable is it?</b>	Very soft and easily shaped	Quite hard and more difficult to shape
<b>What kind of sound does it make?</b>	Quite sonorous	Very sonorous

Think: what kind of properties do you want?

Are there any mathematical relationships?



# Evaluating data

**Q1) From which material would you make a bell?**

The property you need for a bell is..

This means that...

The cost of the materials is..

Overall, I think the best option is...

