



The Periodic Table Questions

1. What is an element?

2. Calcium is an element whose name comes from the Latin term *calx*, meaning 'lime'. The symbol for calcium is written using the first two letters of its name.

What is the symbol for calcium.

Tick **one** box.

☐

ca

☐

cA

☐

Ca

☐

CA

3. Why did scientists find it hard to organise the elements at first?

Tick **one** box.

☐

They did not have the right technology.

☐

There were too many elements.

☐

Not all of the elements had been discovered yet.

☐

They didn't know what the properties of the elements were.

4. Explain how Mendeleev overcame this problem.

5. Complete the sentences to describe the trend in the properties as you move across a period.

The atomic number _____ as you move from left to right across a period.

The radius of an atom _____ as you move from left to right across a period.

6. Describe how elements with similar properties are organised on the periodic table.



7. An element is a gas at room temperature. It has a low density and is a poor conductor of heat and electricity. The element reacts with virtually all other elements.

Which type of element is this most likely to be?

Tick **one** box.

- ☐ actinide
- ☐ alkali metal
- ☐ halogen
- ☐ noble gas

8. A shiny grey metalloid can conduct electricity, is very brittle and has a low density.
Tick **one** box in each row to show whether each property is a typical metal property or a typical non-metal property.

| Property | Typical Metal | Typical Non-Metal |
|----------------------|---------------|-------------------|
| shiny | | |
| conducts electricity | | |
| brittle | | |
| low density | | |

9. Compare the properties of the alkali metals with the properties of the noble gases.
