

- In the periodic table the alkali metals are found in group \_\_\_\_\_.
- The alkali metals are all stored \_\_\_\_\_ to keep out air and water.
- When sodium burns: sodium + \_\_\_\_\_  $\rightarrow$  \_\_\_\_\_.
- When potassium is added to water the gas formed is \_\_\_\_\_.
- They are called alkali metals because they form an alkali when \_\_\_\_\_.

- |  |            |            |
|--|------------|------------|
|  | Metalloids |            |
|  |            |            |
|  |            |            |
|  |            |            |
|  |            | Non-metals |

## Transition metals

## Halogens

Alkali metals

Noble gases

Alkali Earth metals

A blank periodic table grid. It consists of 18 columns and 7 rows. The first two columns are on the left, followed by a large gap, then a block of 6 columns, and finally a single column on the far right. This layout represents the standard periodic table with the noble gases (Group 18) represented by the single column on the right.

- Drag and drop the following boxes to organise equations for the products below:

|                                                                                   |                                                                                   |                                                                                   |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| copper                                                                            | sodium                                                                            | oxygen                                                                            |                                                                                     |
| carbon                                                                            | magnesium                                                                         | sodium                                                                            |                                                                                     |
| oxygen                                                                            | sulfur                                                                            | phosphorus                                                                        |                                                                                     |
| copper                                                                            | phosphorus                                                                        | oxygen                                                                            |                                                                                     |
| magnesium                                                                         | carbon                                                                            | oxygen                                                                            |                                                                                     |
| oxygen                                                                            | oxygen                                                                            | sulfur                                                                            |                                                                                     |
| oxide                                                                             | oxide                                                                             | oxide                                                                             |                                                                                     |
| oxide                                                                             | dioxide                                                                           | dioxide                                                                           |                                                                                     |

**1) Magnesium oxide:**

**2) Phosphorus oxide:**

**3) Carbon dioxide:**

**4) Sulfur dioxide:**

**5) Copper oxide:**

**6) Sodium oxide:**

- Organise the oxides into the table below:

Magnesium oxide

Sodium oxide

Phosphorus oxide

Carbon dioxide

Sulfur dioxide

Copper oxide

| Metal oxides | Non-metal oxides |
|--------------|------------------|
|              |                  |
|              |                  |
|              |                  |

Complete the following word equations using the words in the box below.

|        |          |         |        |        |              |       |
|--------|----------|---------|--------|--------|--------------|-------|
| carbon | hydrogen | lithium | oxygen | sodium | sodium oxide | water |
|--------|----------|---------|--------|--------|--------------|-------|

a \_\_\_\_\_ + \_\_\_\_\_ → lithium oxide

b sodium + oxygen → \_\_\_\_\_

c \_\_\_\_\_ + oxygen → carbon dioxide

d \_\_\_\_\_ + \_\_\_\_\_ → sodium hydroxide + \_\_\_\_\_