**CC4 Revision Mat: The Periodic Table**

**Elements and the periodic table:**

Complete the table:

|  |  |  |
| --- | --- | --- |
| **Element** | **Symbol** | **Metal or non metal?** |
| Hydrogen |  |  |
| Sodium |  |  |
| Oxygen |  |  |
| Magnesium |  |  |
| Fluorine |  |  |
| Copper |  |  |

How did Mendeleev arrange elements in the periodic table?

…………………………………………………………………………………………………………………………………………………………………………

How does Mendeleev’s periodic table and the modern periodic table differ?

…………………………………………………………………………………………………………………………………………………………………………

Explain Mendeleev’s reasons for this difference.

……………………………………………………………………………………Explain why Mendeleev swapped the positions of Tellurium (Te) and Iodine (I).

…………………………………………………………………………………………………………………………………………………………………………

**Electronic configuration:**

How many electrons fit in the first shell? ……….

How many electrons fit in 2nd, 3rd, 4th etc? ………

Sodium has 11 electrons. Draw the electron shells

How would you write the electronic configuration of sodium? ………………………………………

Draw the electronic configuration of a magnesium atom

Write the electronic configuration

……………………………………………………………………………………

How does group number link to electron configurations?

……………………………………………………………………………………

How does period number link to electron configurations?

……………………………………………………………………………………

Explain why oxygen is in group 6

……………………………………………………………………………………

**Modern Periodic table:**

Shade in metals and non-metals in different colours.



What is meant by an element’s atomic number?

……………………………………………………………………………………

What is a row called?

……………………………………………………………………………………

How are the elements arranged in rows?

……………………………………………………………………………………

What is a column called?

……………………………………………………………………………………

Why are elements placed in the same column?

……………………………………………………………………………………

What type of analysis did scientists carry out to identify atomic number?

…………………………………………………………………………………………………………………………………………………………………………