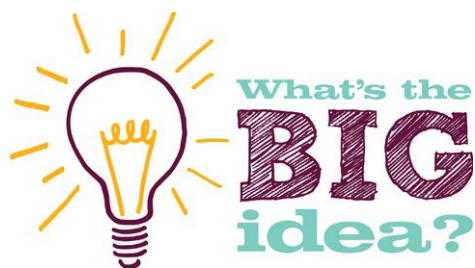
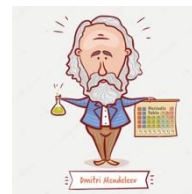


# 100% Sheet The Periodic Table



# All material in the Universe is made of very small particles.

Group 1  
Alkali metals

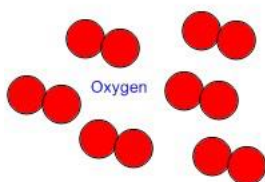
each element has a mass number (relative atomic mass) and atomic number (proton number)

## Group 7 Halogens

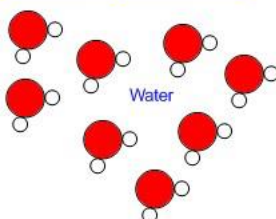
Each row is a **'period'**, and each column is a **'group'**

\*The Lanthanides (atomic numbers 58-71) and the Actinides (atomic numbers 90-103) have been omitted. Cu and Cl have not been rounded to the nearest whole number.

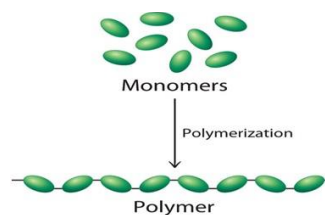
## Polymer



Elements: What all substances are made up of, and which contain only one type of atom.



Compound: Pure substances made up of two or more elements strongly joined together.



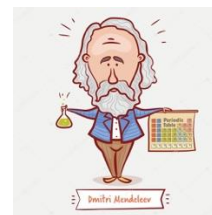
**Polymer:** A molecule made of thousands of smaller molecules in a repeating pattern. Plastics are man-made polymers, starch is a natural polymer.



A group on the periodic table has elements that are similar to each other but different to the elements in a different group.

You need to know the content of this sheet. 100%

# 100% Sheet The Periodic Table



**WORK FOR  
PROGRESS**

## Matter

All material in the Universe is made of very small particles.

Working Towards

Expected

Greater Depth

The list below shows properties that different elements can have.

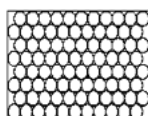
- magnetic
- can be compressed
- very high melting point
- very low melting point
- good conductor of heat
- poor conductor of heat
- good conductor of electricity
- poor conductor of electricity

(a) Which **two** properties from the list above make aluminium suitable for saucepans?

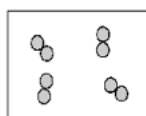
(b) Which property in the list above explains why:

- copper is used in the cable of a television?
- a lot of oxygen gas can be pumped into a very small container?

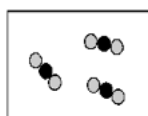
The diagrams represent the arrangement of atoms or molecules in four different substances, A, B, C and D.



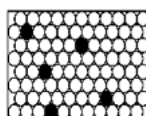
A



B



C



D

Each of the circles, ,  and  represents an atom of a different element.

- Which substance is a compound?
  - Which substance is a mixture?
  - Which **two** substances are elements?
  - Which **two** substances could be good thermal conductors?
  - Which substance could be carbon dioxide?

Gold, iron and magnesium are elements which conduct electricity.

Sulphur and phosphorus are elements which do **not** conduct electricity.

When iron and sulphur are heated together, they react to form a new substance called iron sulphide.

From the substances named in the box on the left, give:

- the name of a metal;
- the name of an element which is a non-metal;
- the name of an element which will rust;
- the name of a compound.