

Matter

3. Periodic Table

CONCEPT 2

LESSON GUIDE

GROUP 1 – ALKALI METALS

PRECISE LEARNING POINTS

KNOW

I know how to locate group 1 of the periodic table and can state what type of element they are.

APPLY

I can apply my knowledge to describe the properties of group 1 elements.

EXTEND

I can extend my knowledge to explain patterns in group 1 elements.

NOTES

Elements in group 1 are metals and make up the first column on the left of the periodic table.

They are soft metals (lithium, sodium and potassium can be cut with a knife) with low melting and boiling points compared to other metals. They also have low densities and some of them will float on water.

Group 1 metals are very reactive compared to other metals.

They react with oxygen in the air and their shiny silver colour tarnishes quickly after cutting.

Group 1 elements are also referred to as **alkali metals**. This is because they react with water to form alkaline solutions.

Patterns:

Melting and boiling points of group 1 elements decreases as you move down the group.

Reactivity of the elements in group 1 increases as you move down the group.