Combined Science - Chemistry - Key Stage 4

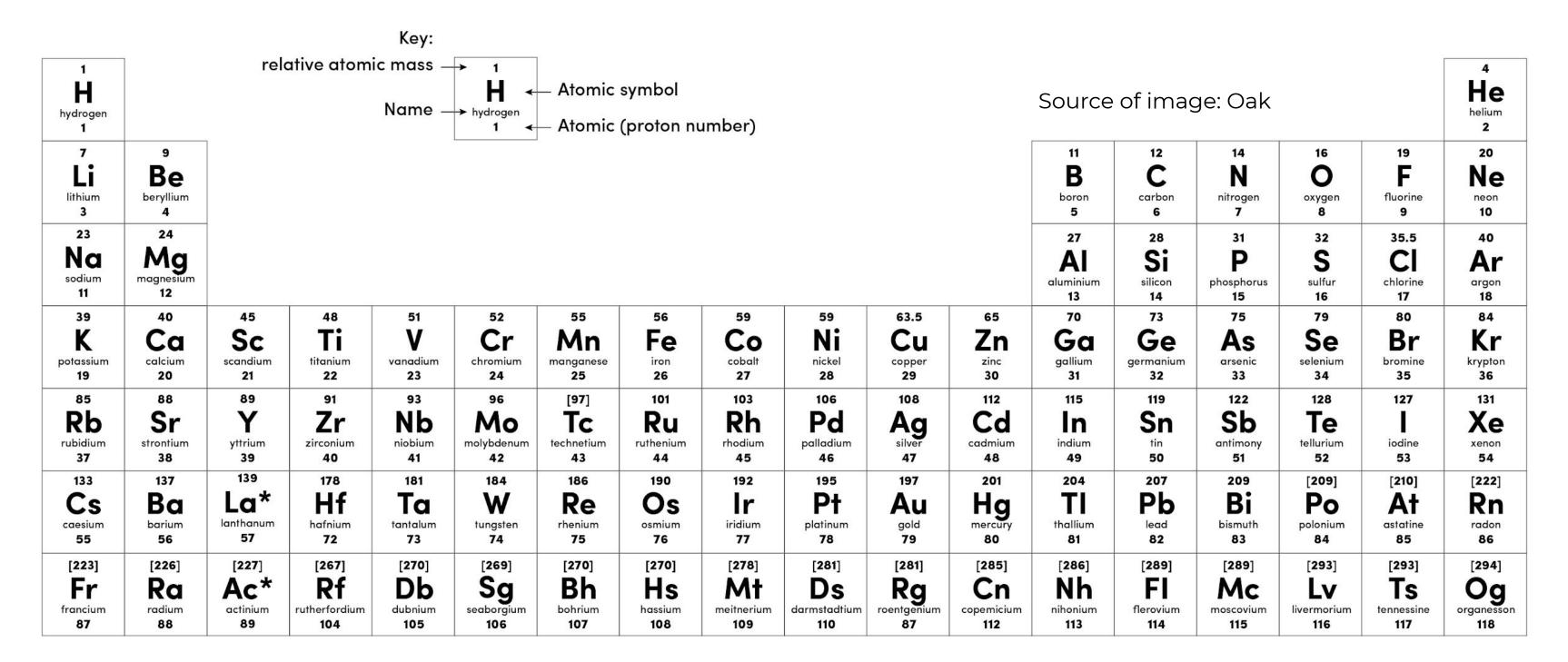
Atomic Structure & the Periodic Table

Displacement reactions - Ionic equations Higher tier

Dr Patel



Periodic Table of Elements





Independent practice

State the <u>formula</u>, <u>name</u> and <u>number of each ion</u> in the reactants and products of the following displacement reactions:

1.
$$2KI + Br_2$$
 \longrightarrow $2KBr + I_2$

Reactants:

Products:

2.
$$2\text{LiBr} + \text{Cl}_2 \longrightarrow 2\text{LiCl} + \text{Br}_2$$

Reactants:

Products:



Independent practice

1. Below is the symbol equation for displacement reaction.

$$2\text{LiBr} + \text{Cl}_2$$
 \longrightarrow $2\text{LiCl} + \text{Br}_2$

- a. What ions are in the reactants?
- b. What ions are in the products?
- c. What is meant by the term spectator ion?
- d. Which species is the spectator ion?
- e. Write an ionic equation for the displacement reaction above

Challenge:

Which species gains electrons during this reaction? Which species loses electrons during this reaction?

