

## Unscrambling definitions – teachers notes

### Education in Chemistry

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[rsc.li/30H4UGW](http://rsc.li/30H4UGW)

### Improve chemical understanding with these two vocabulary-based activities

*Unscrambling definitions* is much harder than it looks. Students need to pick a 'piece' from each column to make coherent definitions for all of the terms. This is great for starting a revision lesson on a particular topic, ensuring that before students dive into the questions, they have a good understanding of the terms they will be facing.

Unscramble the following sentences (phrases can be used once, more than once, or not at all):

A	B	C	D	E
An acid	is a substance	that produces	H <sup>+</sup> ions	a base
A base	is	of the	acids	to form a salt and water
An alkali	is the chemical reaction	concentration of	CO <sub>3</sub> <sup>2-</sup> ions	ion
A salt	is an ionic compound	in which	the H <sup>+</sup> ions in an acid	when dissolved in water
Neutralisation	is a measure	that neutralises	acid and	in a solution
A proton		between an	hydrogen	have been replaced by metal ions
The pH scale		a	OH <sup>-</sup> ions	

*Connective completion* asks students to use logical connectives they are less familiar with to complete an explanation. These are excellent plenary activities as students need to be familiar with the logical argument made in the lesson to be successful. As they become more confident using a range of connectives themselves, their accuracy in interpreting exam questions develops too.

Potassium is more reactive than sodium \_\_\_\_\_ a potassium atom is larger,  
 \_\_\_\_\_ the force of attraction between the nucleus and the outer shell is weaker  
 \_\_\_\_\_ the greater nuclear charge in a potassium atom.

Choose the correct combination of words from the table below:

A	hence	so	despite
B	since	thus	in spite of
C	nevertheless	consequently	in spite of
D	because	consequently	in accordance with

## Answers

### *Unscrambling definitions:*

An acid is a substance that produces  $\text{H}^+$  ions when dissolved in water.

A base is a substance that neutralises acids to form a salt and water.

An alkali is a substance that produces  $\text{OH}^-$  ions when dissolved in water.

A salt is an ionic compound in which the  $\text{H}^+$  ions in an acid have been replaced by metal ions.

Neutralisation is the chemical reaction between an acid and a base.

A proton is a hydrogen ion.

The pH scale is a measure of the concentration of  $\text{H}^+$  ions in a solution.

### *Connective completion:*

B: Potassium is more reactive than sodium **since** a potassium atom is larger, **thus** the force of attraction between the nucleus and the outer shell is weaker **in spite of** the greater nuclear charge in a potassium atom.