

Monitor key concepts

Education in Chemistry

September 2019

rsc.li/2E4IOEo

You can use this tracker to monitor when you've introduced key concepts, given examples, set practice questions and retrieved them. You can also note the contexts you've used for examples and questions.

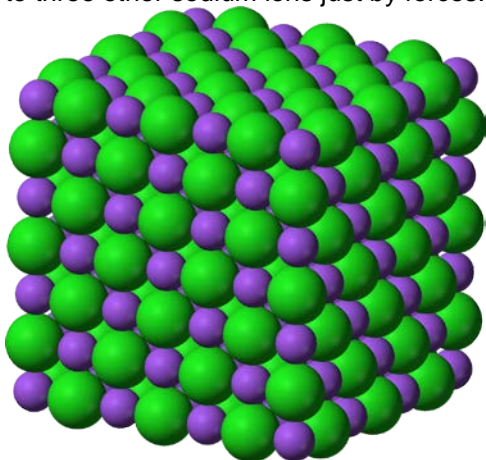
Concept tracker

Concept	Contexts	I = introduction, E = examples, P = practice, R = retrieval												
		I Sep	E Unit 2	P Unit 2	R Home work	R Starter	E Crude Oil	R EoT test						
Example: <i>Forces hold particles together in solids and liquids. These must be overcome for melting and boiling to take place. The stronger they are, the higher the melting and boiling points.</i>	- Melting curves - Properties of simple/ giant covalent substances - Distillation													

Diagnostic questions

Use diagnostic questioning to assess if your students are harbouring misconceptions. For example, for ionic bonding, you could use these questions. Learn Chemistry's [Chemical misconceptions II](#) is useful for identifying key concepts in structure and bonding.

1. This diagram represents sodium chloride. In a sodium chloride lattice, each chloride ion is attracted to one sodium ion by a bond and is attracted to up to three other sodium ions just by forces.



- a) True
- b) False
- c) Don't know

2. Which of these statements is true?
 - a) A sodium ion can be bonded to any neighbouring negative ion, if it is close enough.
 - b) It is not possible to know where the ionic bonds are in a lattice, unless you know which chloride ions accepted electrons from which sodium ions.
 - c) A chloride ion is only bonded to the sodium ion it accepted an electron from.
 - d) A chlorine atom can only form one strong ionic bond, because it can only accept one more electron into its outer shell.