Match these properties with their definitions.



There is one word left without a definition. The number of letters in this word is the first digit of the access code.





Sort these materials into magnetic and non-magnetic.



The number of non-magnetic materials is the second digit of the access code.





Read these statements about dissolving.

	True	False	
Dissolved particles cannot be seen because they have mixed with the water.			
Substances which dissolve are called soluble.			
Only white powder dissolves.			
Solids can't dissolve.			
Dissolved substances disappear.			
It is possible to get dissolved substances back.			
The hotter the water, the quicker solids dissolve in it.			
The bigger the soluble particle, the faster it dissolves.			

The number of true statements is the third digit of the access code.





Which of these substances will dissolve in water?



The number of substances that will dissolve in water is the fourth digit of the access code.





Look at these changes. Which are reversible and which are irreversible?

	Reversible	Irreversible
Frying an egg		
Freezing water		
Baking a mixture of flour, sugar, butter and eggs		
Melting chocolate		
Making toast		
Burning wood		
Mixing vinegar and bicarbonate of soda		
Melting wax		

The number of irreversible changes is the fifth digit of the access code.









Rearrange the letters in the orange boxes to spell the sixth digit for the access code.





Class 5 are carrying out an experiment to find out whether the temperature of water affects how quickly salt will dissolve.

Which option shows all the variables they should keep the same?

- 1. The amount of salt, the amount of water, the number of times they stir the mixture, the time they leave the mixture for.
- 2. The amount of salt, the temperature of the water, the number of times they stir the mixture, the time they leave the mixture for.
- 3. The amount of salt, the amount of water, the number of times they stir the mixture.
- 4. The amount of salt, the number of times they stir the mixture, the time they leave the mixture for.

The number of the correct option is the seventh digit for the access code.







Class 5 did an experiment to find out whether the temperature of water affected how quickly salt would dissolve. They put their results in a graph.



The difference in the time taken for the salt to dissolve at 5°C and 25°C is the eighth digit of the access code.





Look at these changes in state.



How many of these changes happen because of an increase of heat? This number is the ninth digit of the access code.





Electricity can travel easily through electrical conductors but some materials do not let electricity pass through them. These are known as electrical insulators.

	pure water	drinks can	paper	2p coin		
	rubber gloves	glass	copper pipes	gold ring		
	wooden plank	steel post	sea water	a diamond	Th	
The number of electrical insulators is the tenth digit of the access code.						





twinkl