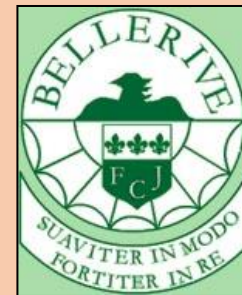


# Lesson 1 –

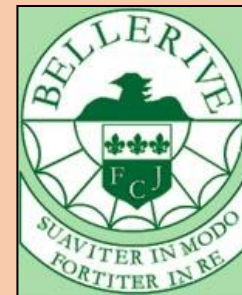


## Key points to learn:

- all materials are made up of particles.
- a property is how a substance behaves
- The properties of solids, liquids and gases with respect to volume, shape, density, compressibility and ease of flow

Revision guide p7

## Lesson 2 –

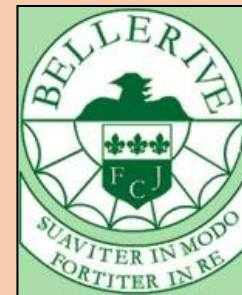


Key points to learn:

- Different states of matter have different densities
- Density is a measure of how much matter there is in a particular volume
- To calculate density take the mass in g and divide by the volume in  $\text{cm}^3$
- A substance floats in water if its density is less than  $1\text{g}/\text{cm}^3$

Revision guide p9

## Lesson 3 –



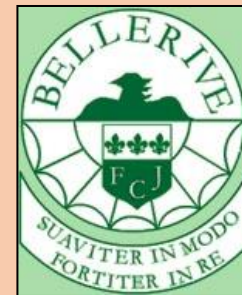
Key points to learn:

- Different states of matter have different properties
- Particle diagrams can show the differences in the arrangement of particles in the three different states
- the properties can be explained by the movement and arrangement of particles

<https://www.doddlelearn.co.uk/app/teacher/launch-content/52233c25-5dd9-45e1-8c44-e6e1d82c89ab> SLG part1 slides 1-11

Revision guide p9

# Lesson 4 –



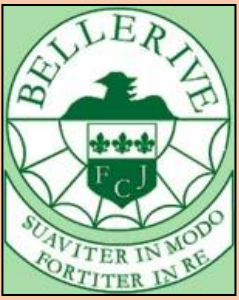
## Key points to learn:

- Gas pressure is caused by gas particles hitting the sides of a container
- The collisions create a pushing force on the sides of the container
- When temperature increases, the particles hit the sides harder and more often. This increases the pressure
- When the volume of a container is reduced, the particles hit the sides more often as there is less space. This increases the pressure.

Revision guide p12

<https://www.doddlelearn.co.uk/app/teacher/launch-content/31c5a7fe-ddf2-4f6b-a0d7-9c23a70f893c> particles and properties revision

## Lesson 5 and 6 –

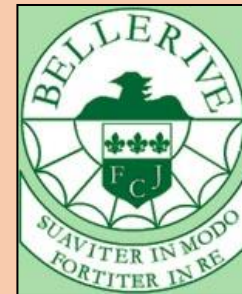


### Key points to learn:

- Diffusion takes place in liquids and gases only
- Diffusion is the movement of particles from an area of high concentration to an area of low concentration
- Diffusion is slower in liquids than in gases

Revision guide p13

## Lesson 7 –

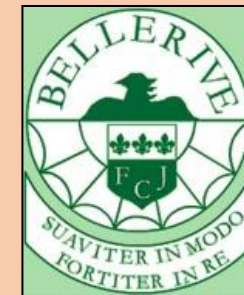


Key points to learn:

- Changes of state involve a change in energy
- The arrangement and movement of particles is affected by the temperature of the substance

Revision guide p16

## Lesson 8 –



Key points to learn:

- Matter can change from one state to another. These are called changes of state.
- Melting, freezing, boiling, condensing and sublimation are all changes of state.

Revision guide p16

## Lesson 9 –



### Key points to learn:

- Heating and cooling curves can demonstrate the changes in energy of a substance
- The flat part of the curve shows a change in the forces between the particles in the substance.
- In a heating curve the flat part shows that the energy supplied is weakening the forces between the particles
- In a cooling curve the flat part of the curve shows that energy is given out as the forces between the particles become stronger

Revision guide p17

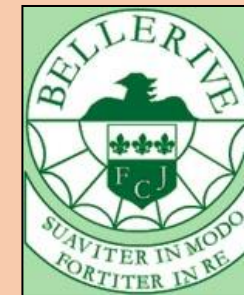


## Lesson 10 –

Key points to learn:

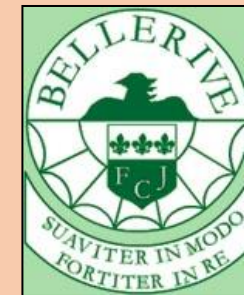
- Changes of state are physical changes.
- Physical changes are reversible and conserve mass.

Revision guide p16



# Lesson 11 –

## Assessment lesson



# Lesson 12 –

## Revision lesson

