

## 7.2 Fluids and the Particle Theory of Matter



### Across

- \_\_\_\_\_ is anything that has mass and volume.
- In liquids and solids the particles are close together and have strong forces of \_\_\_\_\_ between them.
- \_\_\_\_\_ can flow and spread out because their particles are far apart and have overcome their attraction for each other.
- \_\_\_\_\_ is a measure of how much space a substance takes up.
- \_\_\_\_\_ hold a definite shape because their particles are packed closely together and vibrate in one place.
- Particles in a liquid can overcome some of their attraction to each other and slide past each other. This is why liquids \_\_\_\_\_ and take the shape of their container.
- When the \_\_\_\_\_ of a solid, liquid or gas decreases, its particles move more slowly and closer together.
- Temperature affects the speed at which \_\_\_\_\_ move.

### Down

- In the early days of glass making \_\_\_\_\_ sand was heated to more than  $1700^{\circ}\text{C}$ .
- Glass \_\_\_\_\_ involves placing various pieces of molten glass on a surface so that they are in contact.
- \_\_\_\_\_ involves using air to shape molten glass, much like blowing a bubble with bubblegum.
- \_\_\_\_\_ \_\_\_\_\_ is an increase in the volume of a substance in response to an increase in its temperature.
- The particle theory of matter is a way of explaining the \_\_\_\_\_ of matter.
- \_\_\_\_\_ can flow and take the shape of their container because their particles have partly overcome their attraction for each other.
- The volume of most fluids decreases when they cool from a liquid to a solid. \_\_\_\_\_ is an exception.
- \_\_\_\_\_ is a measure of how much matter there is in a substance.
- \_\_\_\_\_ involves heating glass to temperatures around  $600^{\circ}\text{C}$  so it can be shaped in a mould.