

8I Fluids – Revision Book

Name _____

Target Grade _____

Complete after the booklet. Two things I need to revise again are:

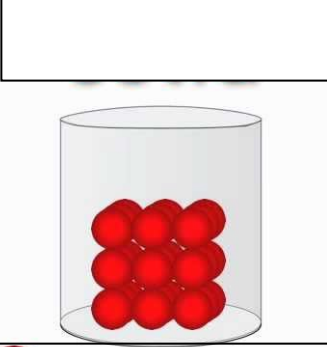
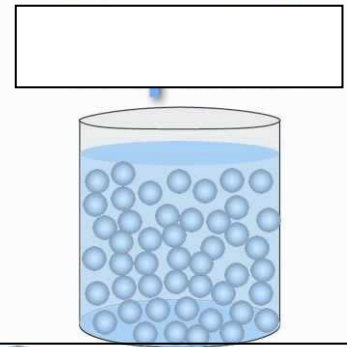
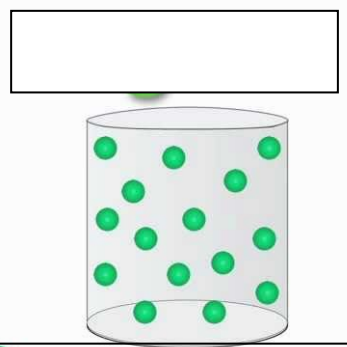












1. _____

2. _____

The Particle Model

Level	What I need to do...
3	State the three states of matter
4	Describe the three states of matter in terms of shape, volume and compressibility
5	Using the particle model explain the properties of solids, liquids and gases.

Fill in the gaps at the top of the table

			
Describe the shape	 <input type="text"/>	 <input type="text"/>	 <input type="text"/>
Can it be compressed Y or N?	 <input type="text"/>	 <input type="text"/>	 <input type="text"/>
Is the volume fixed Y or N?	 <input type="text"/>	 <input type="text"/>	 <input type="text"/>
What do we call water in this state?			

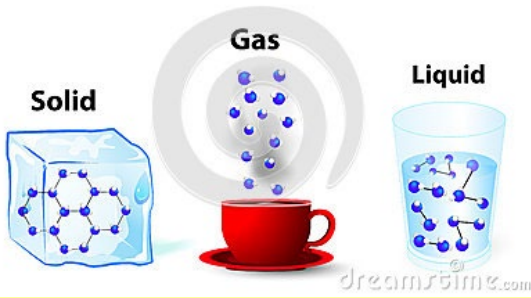
Level 3

Level 4

Level 5

Explain the state using the particle model. Talk about particle spacing, the forces between them and their movement			
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FUNDAMENTAL STATES OF MATTER



Changing State

Level	What I need to do...
3	Name the three states of water
4	Understand that ice is less dense than water
5	Describe how the volume and density changes during the water-ice transition - how are they different to others?

Complete the word fill

Ice is _____ water. When it melts it turns in to a _____.
If water is heated the gas produced is called _____.

Why do icebergs float? _____

Why is solid water different from most other substances?

Pressure in Fluids

Level	What I need to do....
3	State what is meant by gas pressure and recall some of its effects.
4	Recall that pressure in a fluid changes with depth
5	Use a particle model to help describe the causes of pressure in fluids.

Level 3

When a container is full of gas the particles moving around hit the walls of the container. This causes p_____

Delete a required

Level 4

Pressure in fluids increases/decreases as temperature increases

Pressure in fluids increases/decreases as depth increases

Level 5

Use the particle model to explain why pressure increases as a gas is compressed.



Floating and Sinking

Level	What I need to do...
3	State some objects that would float or sink
4	Write a definition for upthrust
5	Explain why an object floats

List 3 things that sink _____

List 3 things that float _____

Use the glossary, write a definition for upthrust

Use the ideas of weight and upthrust to explain why things float. _____

Level 3

Level 4

Level 5

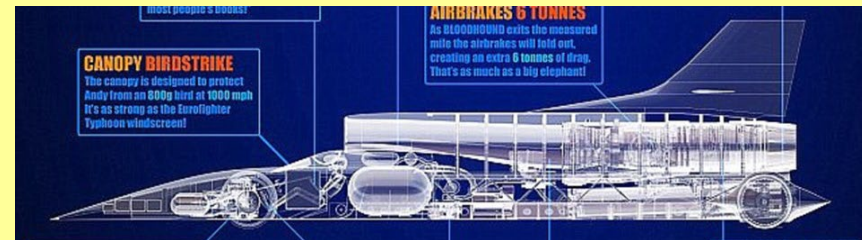
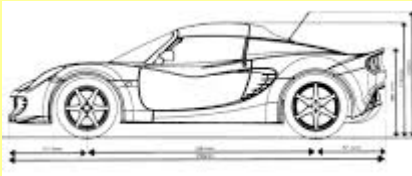
Drag

Level	What I need to do...
3	Name any resistive forces
4	Describe the ways in which the size of drag forces can be changed.
5	Explain the effects of balanced forces in simple situations

Level 3

Cross out the forces that are NOT contact forces, upthrust, friction, gravity, water resistance, air resistance, nature, drag.

Streamlining is one way to reduce drag, which of these shapes is the most streamlined.



Level 4

Suggest 2 other things that increase or decrease drag

Level 5

Use the particle model to explain why pressure increases as a gas is compressed.