

SCAN ME



**Revision**

Retrieval, keyword definitions and equation practice.

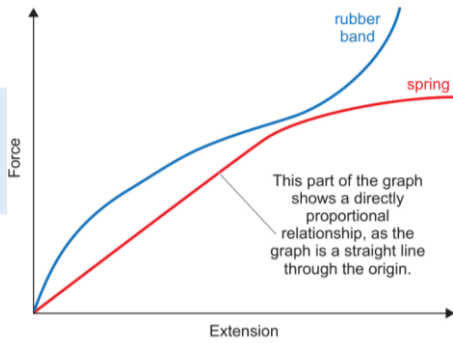
**Final assessment**

Review of learning

**Apply:**  
16+ Particle physics  
Mechanics fluids

**Pressure and upthrust**

Why does pressure in a liquid depend on density and depth?

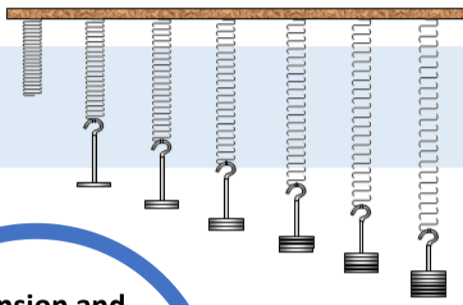


**Pressure in fluids**

How can you calculate force, pressure and area?

**Investigating springs**

**CORE PRACTICAL –** Investigate the extension and work done when applying forces to a spring.



**Extension and energy transfers**

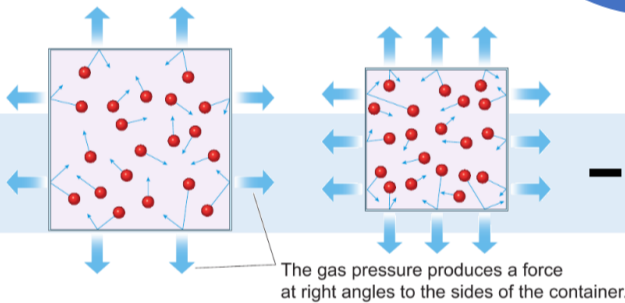
What is the equation that relates the forces and extension of a spring?

**Bending and stretching**

What is the difference between elastic and inelastic distortion?

**Gas temperature and pressure**

How does the temperature of a gas affect its pressure?

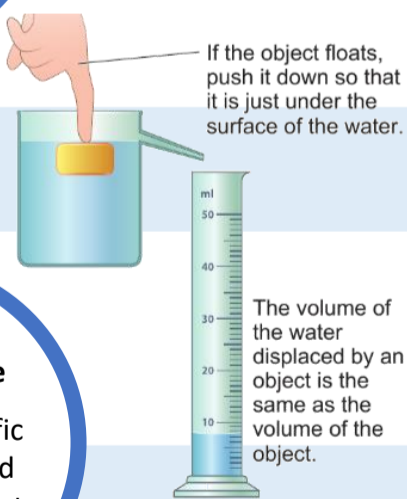


**Gas pressure and volume**

How can you calculate the volume or pressure of a gas at a fixed temperature?

**Investigating water**

**CORE PRACTICAL –** investigate the properties of water by determining the specific heat capacities of water and obtaining a temperature-time graph for melting ice.



**Energy and changes of state**

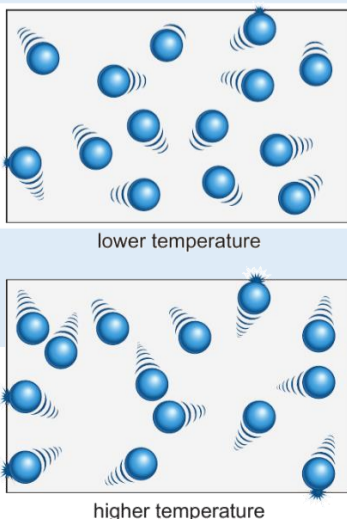
What does specific heat capacity and specific latent heat mean?

**Energy calculations**

How can we calculate the energy needed to make a substance melt or evaporate?

**Investigating densities**

**CORE PRACTICAL –** Investigate the densities of solids and liquids.



**LESSON 1**

**Particle density**

What happens to particles when a substance changes state?

**Retrieve:**  
KS2 Groups materials as solids, liquids or gases  
Observe materials change state when they are heated  
P1.1.2 Bending and stretching  
States of matter  
C1.1 Particles and their behaviour (Particle model, States of matter, melting and freezing)  
P2.2.4 energy transfer: particles  
P2.3.4 Pressure  
SP2 Mass and weight / Newtons third law  
SP3 Kinetic theory / work done  
SP8 Work done

Make sure you can write definitions for these key terms.

state of matter, changing state, density, temperature, thermal energy, specific heat capacity, specific latent heat, gas pressure, Pascal, absolute zero, Kelvin, work done, volume, elastic, inelastic, extension, spring constant

Key terms

