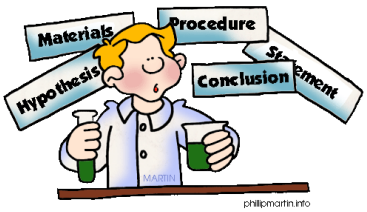
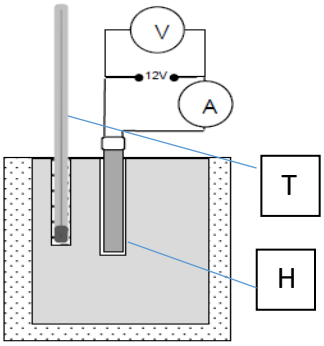
You need to know the content of this sheet. 100%

100% Practical Sheet
Specific Heat Capacity



An investigation to determine the specific heat capacity of a material



"What is it? What is it for?"

V

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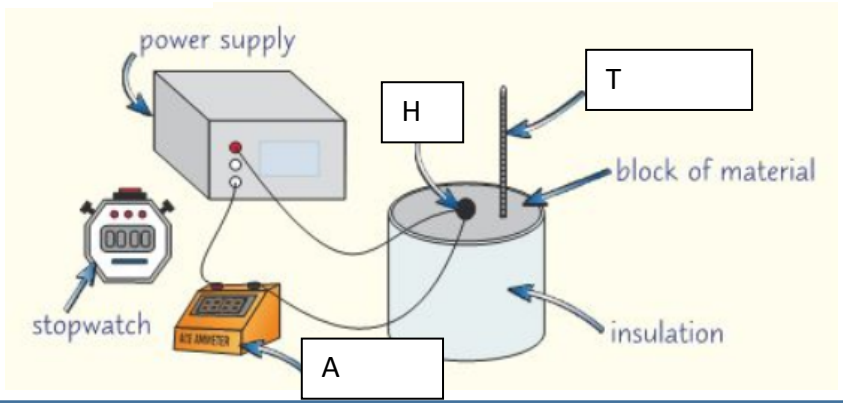


"What do you do with it?"

Before you start the initial temperature is taken – why? Then the power is turned on at the same time the stopwatch is started. What information are you going to record?

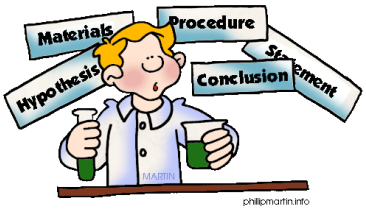
You waited till the block had heated up by 15°C and turned off the power supply and stopped the timer. Why did you continue to measure the temperature and when did you stop recording the temperature?

Now you have your data you can use the equations P=IxV to calculate the power supplied to the heater and P=E/t to calculate the energy transferred. Show how you change the equation below.

Identify all the variables in the equation $E = mc\Delta\theta$ and show how you rearrange it to calculate c for your material.

You need to know the content of this sheet. 100%

100% Practical Sheet
Specific heat capacity



Chemical reactions
involve rearrangement of atoms in substances to form new substances.

"What do you learn? What if…? What else… ?"

1. From memory, summarise the method used. Use as few sentences as possible.

2. Why would your result most likely be different from the actual value of specific heat capacity for that material?

3. Explain why insulation around the block would give a better result.