

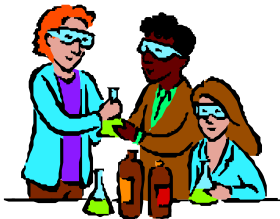
Lornshill Academy



S1 Science

Unit 1: Measure up

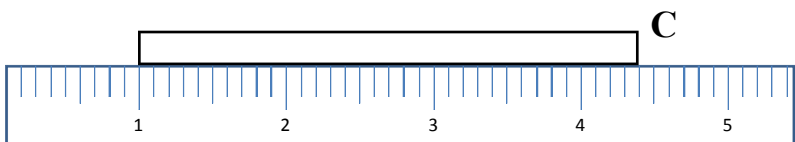
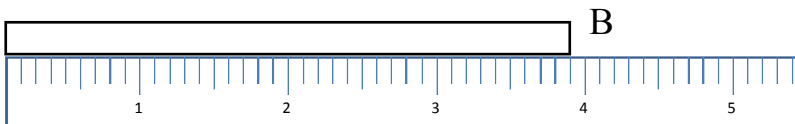
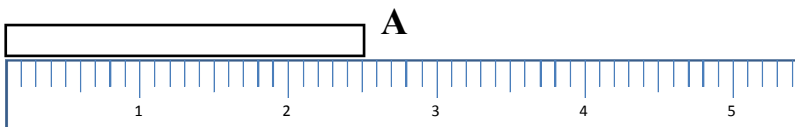
Homework Questions



Book No.

Science Unit 1 - Homework

1. **Write down** the following:
 - (a) 3 safety rules about **safe working** in the lab.
 - (b) 2 safety rules to do with **movement** around the lab.
 - (c) 1 safety rule about **eating or drinking** in the lab.
2. (a) **Describe** what you would do if you found a broken glass beaker in the sink.
(b) **Explain why** it is important to deal with this situation.
3. (a) **List** three different instruments for measuring length.
(b) Give two situations where you would use each of them.
4. Use the ruler below to answer the following questions -
 - (a) The numbers on the rulers show centimetres (cm.)
What is the name for the **smaller** measurements between the numbers?
 - (b) **Write down** the lengths of the blocks A, B and C



Science Unit 1 - Homework

5. **Copy** and **complete** the following table -

| What to measure | Measurement | Units |
|------------------------|-------------|-------|
| Length of jotter | | |
| Length of right thumb | | |
| Length of phone | | |
| Height of bedroom door | | |
| Width of toilet roll | | |

6. **Find out** the world record for the men's and women's javelin.

Record these in your jotter.

7. **Convert** the following measurements by **copying** and **completing** the statements -

$$3 \text{ km} = \underline{\hspace{2cm}} \text{ m}$$

$$5 \text{ cm} = \underline{\hspace{2cm}} \text{ mm}$$

$$32 \text{ mm} = \underline{\hspace{2cm}} \text{ cm}$$

$$1800 \text{ m} = \underline{\hspace{2cm}} \text{ km}$$

$$4.25 \text{ kg} = \underline{\hspace{2cm}} \text{ g}$$

$$500 \text{ g} = \underline{\hspace{2cm}} \text{ kg}$$

Science Unit 1 - Homework

8. **Write down** three jobs which would need you to be able to weigh things accurately.
9. **Describe** how you would **weigh** the **liquid** in a small bottle of Irn Bru.
10. **Describe** in a sentence what is meant by the term 'the volume of a liquid'.
11. **Name** three different kinds of containers which can be used to measure the volume of a liquid.
12. 'To make bread dough, you mix 500g of flour, 250 g of butter and 50ml of warm water.'

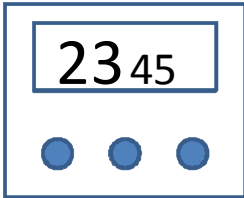
Write down which of the measurements in the recipe is a measure of volume.

13. You are supplied with a bath, a pencil, a kitchen measuring jug and a friend.
Describe how you could measure your friend's volume.
14. **List** three jobs which need you to be able to measure time accurately.
Explain why measuring time is important in each job.
15. **List** three sports which involve the measurement of time.

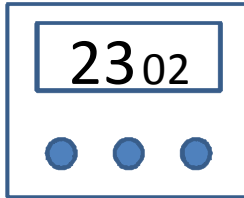
Science Unit 1 - Homework

16. **Write down** the times shown on the three laboratory timers below -

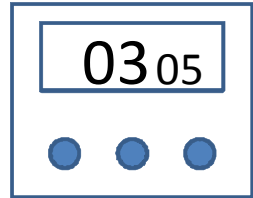
A



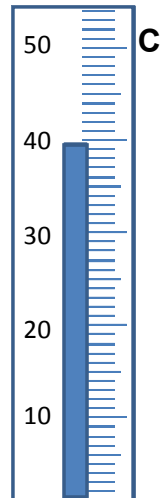
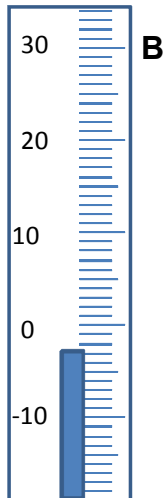
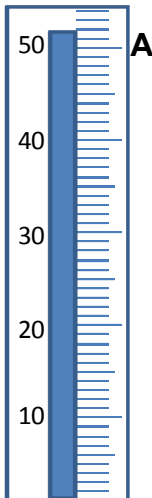
B



C



17. **Write down** the readings on the three thermometers shown below -



18. The reading on the **first** thermometer above shows the temperature of Jo's bath when she ran it. The reading on the **third** thermometer was the temperature when she got out. **Calculate** how much the temperature had dropped while she was in the bath.

Science Unit 1 - Homework

19. **Find out** the missing temperatures to complete the sentences below.

Copy the complete the sentences into your jotter to show your answers -

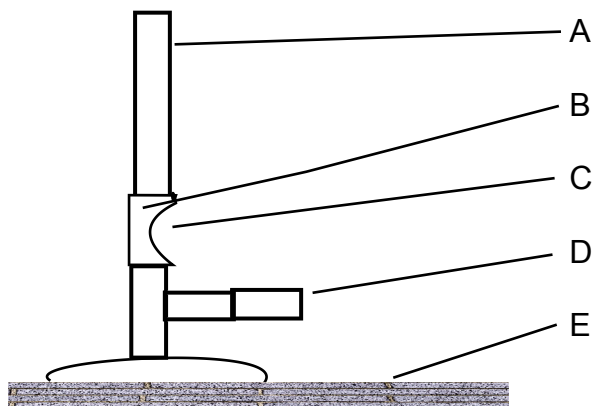
- (a) A fridge should be kept at _____ °C, or the food will _____
- (b) The hottest temperature my oven goes to is _____ °C.
- (c) Roads are likely to be icy if the temperature falls below _____ °C.
- (d) The temperature yesterday was _____ °C during the day.
- (e) Normal body temperature is _____ °C

20. **List 3 jobs** where keeping any eye on temperatures is important.

Explain the importance of temperature to each job.

Science Unit 1 - Homework

21. **List** the names of the parts of the Bunsen burner labelled below -



22. **Describe** how you light a Bunsen burner.

Your description should include -

- Safety equipment
- How to adjust the air hole
- How to adjust the gas tap
- The colour of the flame when the Bunsen burner lights

23. **Explain** the importance of **observing change** in the following situations -

A policeman using a **breathalyser**.

A **metal detector** starting to make a whistling noise.

A sailor watching the colour of clouds.

A cook watching an **egg timer**.

