WALT estimate volume.

WILF:

- *Understand what volume is.*
- *Use the correct unit.*
- *Compare the sizes of shapes to help with your estimation.*
- *Use your knowledge of shape to help you.*

+ Use problem solving language.

Twinkl Slides. Edited = E

Recap: what is volume?

Volume tells us how much space a 3D shape takes up.

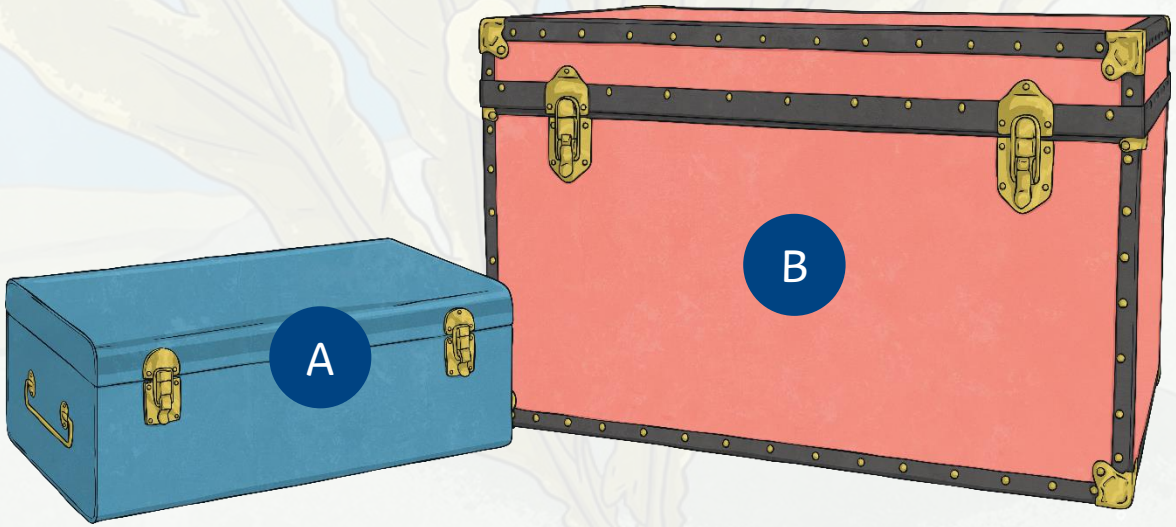
It is measured in cm^3 (cm cubed).

Imagine lots of 1cm cubes inside the shape.

Added slide

Estimate Volume

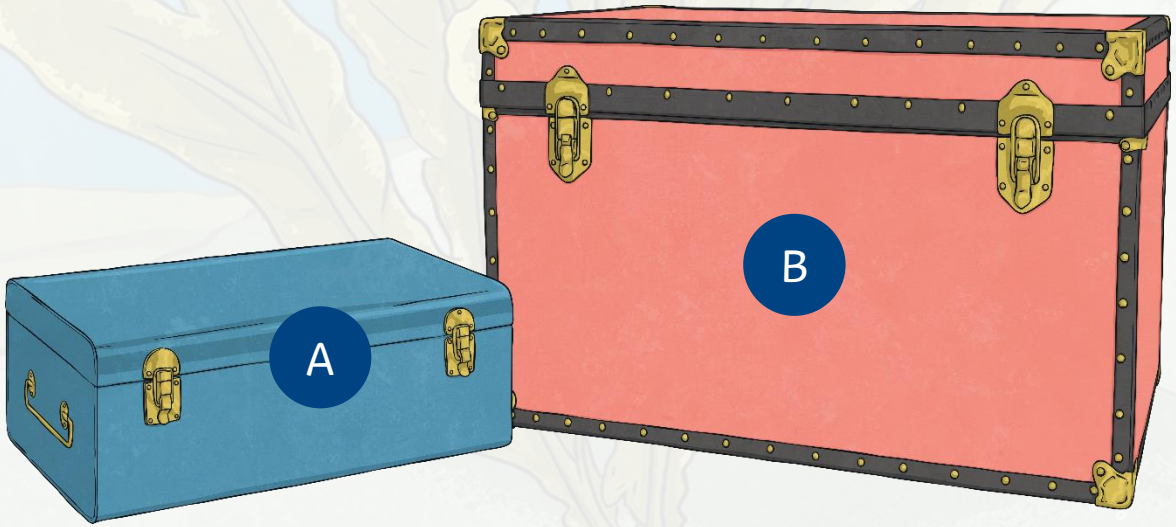
Chest A has a volume of 10 000cm^3. Estimate the volume of chest B.



Remember, this is estimation, so you do not need an exact answer. With this question, you should look at how big A is, then think about how many would fit inside B. Then, multiply 10,000 by how many you think.

Estimate Volume

Chest A has a volume of 10 000cm^3. Estimate the volume of chest B.



B looks like it would fit 3-5 of A inside it. Therefore, any answer between 30,000cm^3 and 50,000cm^3 is correct as an estimation.

Estimate Volume

If the capacity of the bucket is 2000cm^3, estimate the volume of the sand inside.

Think about the amount of space inside the bucket the sand is taking up. The capacity is the maximum amount.

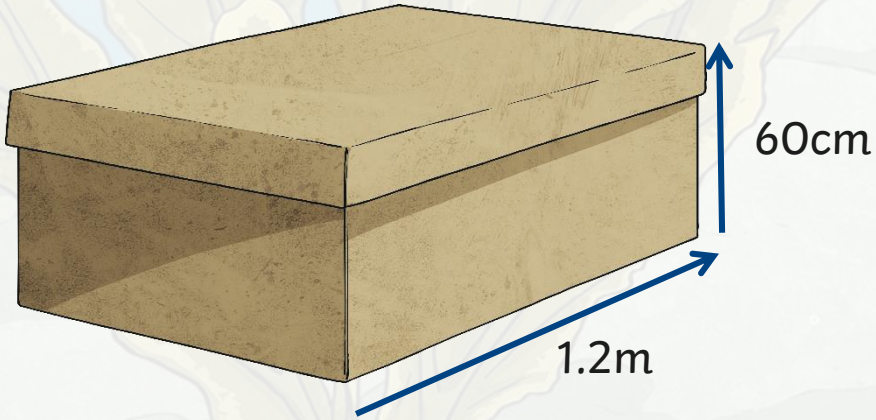
Estimate Volume

If the capacity of the bucket is 2000cm^3, estimate the volume of the sand inside.

The bucket looks around half way full. Therefore, you can estimate anywhere between 800cm^3 and 1200cm^3 .

Estimate Volume

Look at this box:



It is 1.2m wide and 60cm high. How deep do you estimate it to be?

What is the approximate volume?

To answer this, think about your knowledge of rectangles and cuboids. If the width is 1.2m, then the depth will be somewhere between the height and the width (somewhere between 60 and 120).

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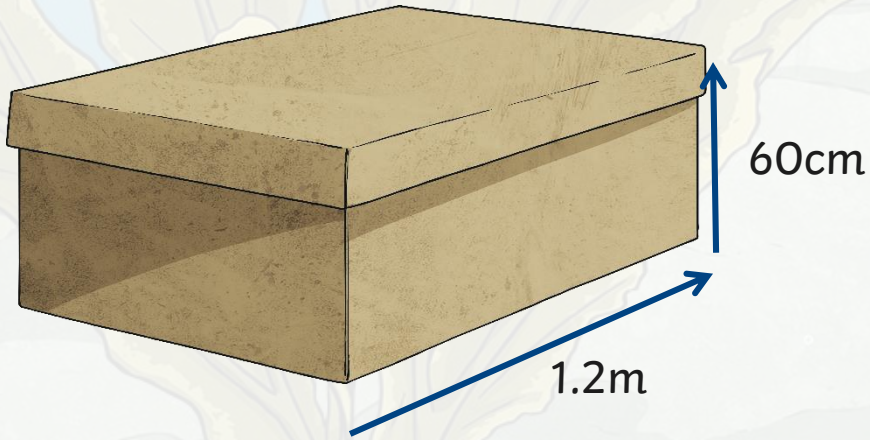
Estimate Volume

Look at this box:



It is 1.2m wide and 60cm high. How deep do you estimate it to be?

What is the approximate volume?

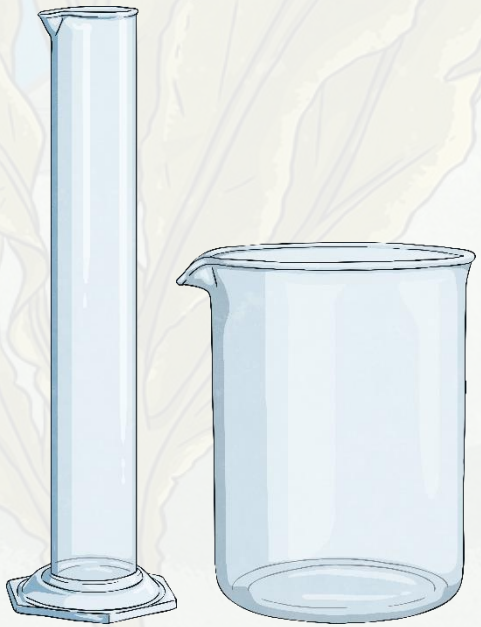
Between 500 000cm^3 and 720 000cm^3

How? Example: If the depth was 80cm, 80 x 120 = 9600 9600 x 60 = 576,000cm^3

If the depth was 90cm, 90 x 120 = 10,800 | 10,800 x 60 = 648,000cm^3

Estimate Volume

Which container do you think will hold more water for Eric's science experiment?



Discuss how you could prove it.

Now have a go at today's activity.
Challenge yourself with your sheet selection. If you start one and it is too easy, move to the next one.