

WALT: define volume.

Please choose one sheet that will challenge you to complete.

1 = unsure 2= I feel alright and 3 = confident.

*If you start a sheet and it isn't challenging you, move to the next sheet.*

1)

- 1) Complete the following sentences:

\_\_\_\_\_ is the amount a container can hold.

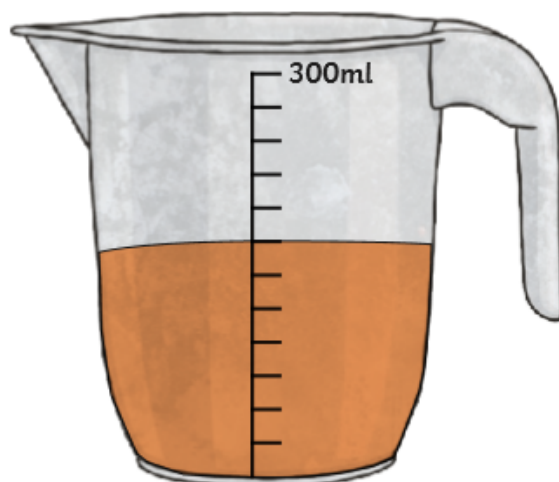


\_\_\_\_\_ is the amount of space something takes up.

- 2) The cuboids listed are made of 1cm cubes. Calculate the dimensions of each cuboid and fill in the table:

Shape	Width	Length	Height	Volume $\text{cm}^3$
A	3cm	2cm		$18\text{cm}^3$
B	4cm			$60\text{cm}^3$

- 3) Look at this container. Identify both the capacity of the container and the volume of the liquid. Remember to use the correct units:



Capacity: \_\_\_\_\_

Volume: \_\_\_\_\_

2)

1) Draw lines to match the volume to the shape.

b) One shape and one volume do not have a match. Circle them.



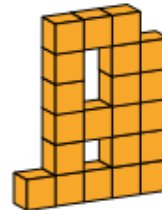
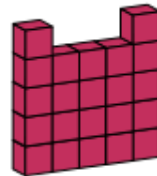
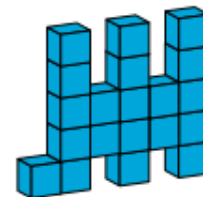
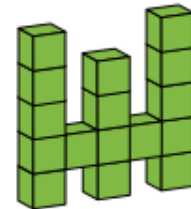
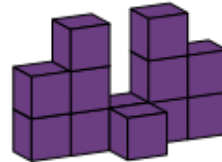
12cm<sup>3</sup>

20cm<sup>3</sup>

21cm<sup>3</sup>

11cm<sup>3</sup>

22cm<sup>3</sup>



2) Abdallah makes a shape with 1cm cubes which has:

- a volume of less than 22cm<sup>3</sup>;
- a height of more than 2cm.

a) Use cubes to make shapes which could fit this description.

b) Draw one of the shapes that you have built in your book.

3)

- 1)** Which shape described here has the greatest volume?



Shape A is 8 cubes long, 3 cubes wide and 2 cubes tall.

Shape B is 9 cubes long, 2 cubes tall and 2 cubes wide.

Shape C is 4 cubes wide, 2 cubes long and 6 cubes tall.

Prove it.

- 2)** Kyla builds a cuboid with a volume of  $16\text{cm}^3$ .
- a)** What could the width, height and length be? Find three possible solutions.
  - b)** She builds a shape with half the volume of her first shape. What could the width, height and length of the new shape be?