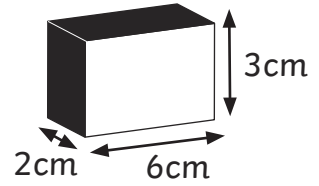


Volume Word Problems

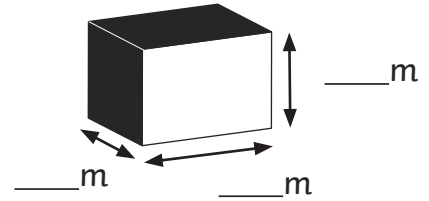
To calculate the volume of a cuboid, multiply the width by the height by the depth,
e.g. $6 \times 3 \times 2 = 36\text{cm}^3$

Remember to give the answer in cm^3 or m^3 .



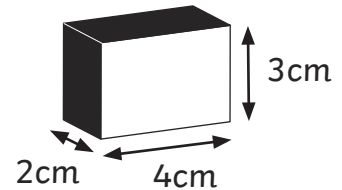
1. a) Label the box with the following dimensions:

- 5m wide
- 4m high
- 3m deep

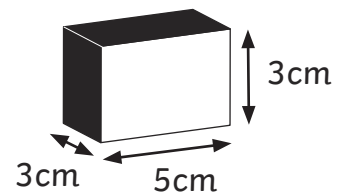


b) Calculate the volume of the box above using the instructions above to help you.

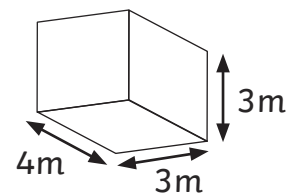
2. James is building a cuboid out of building bricks. It is 4cm wide, 3cm high and 2cm deep. What is the volume of the cuboid?



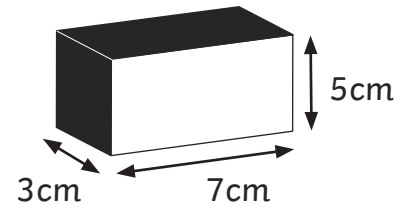
3. Mohammed bought a small trinket box online. The box is 5cm wide, 3cm high and 3cm deep. What is the volume of the box?



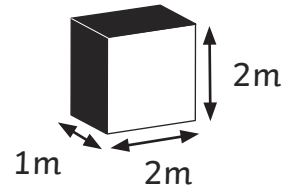
4. Timothy's bedroom is 3m wide, 4m long and 3m from floor to ceiling. What is the volume of Timothy's bedroom?



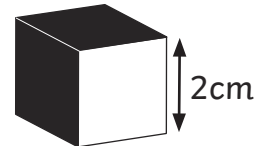
5. Enzo buys a block of butter which is 7cm wide, 5cm high and 3cm deep. What is the volume of the block of butter?



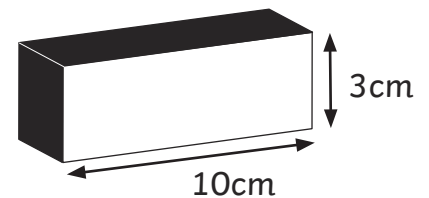
6. Chan bought a new bookcase for his bedroom. It is 2m wide, 2m high and 1m deep. What is the volume of the bookcase?



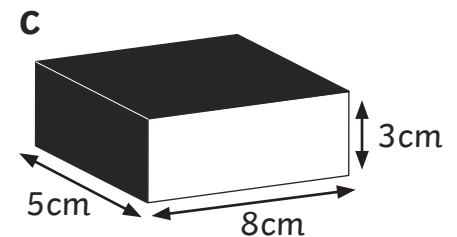
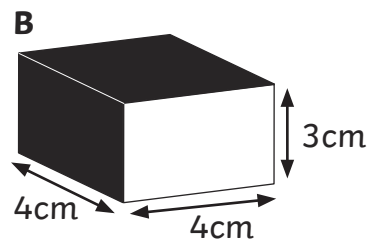
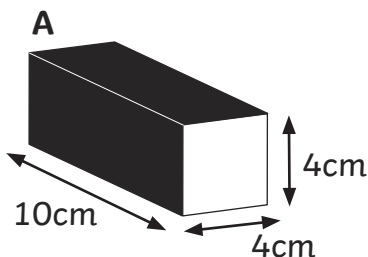
7. Ansel was playing with a dice. He measured one side of the dice. The side measured 2cm. What is the volume of the dice?



8. Juliet had a small jewellery box that measured 60cm^3 . If it was 10cm wide and 3cm high, what was the depth of the jewellery box?



9. Calculate the volume of the following Tupperware boxes and then put them in order from smallest to largest.



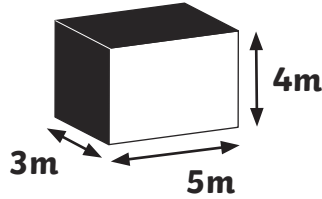
smallest

largest

Volume Word Problems **Answers**

1. a) Label the box with the following dimensions:

- 5m wide
- 4m high
- 3m deep



- b) Calculate the volume of the box above using the instructions above to help you.

60m^3

2. James is building a cuboid out of building bricks. It is 4cm wide, 3cm high and 2cm deep. What is the volume of the cuboid?

24cm^3

3. Mohammed bought a small trinket box online. The box is 5cm wide, 3cm high and 3cm deep. What is the volume of the box?

45cm^3

4. Timothy's bedroom is 3m wide, 4m long and 3m from floor to ceiling. What is the volume of Timothy's bedroom?

36cm^3

5. Enzo buys a block of butter which is 7cm wide, 5cm high and 3cm deep. What is the volume of the block of butter?

105cm^3

6. Chan bought a new bookcase for his bedroom. It is 2m wide, 2m high and 1m deep. What is the volume of the bookcase?

4m^3

7. Ansel was playing with a dice. He measured one side of the dice. The side measured 2cm. What is the volume of the dice?

8cm^3

8. Juliet had a small jewellery box that measured 60cm^3 . If it was 10cm wide and 3cm high, what was the depth of the jewellery box?

2cm

9. Calculate the volume of the following Tupperware boxes and then put them in order from smallest to largest.

A = 10cm wide, 4cm high and 4cm deep = **160cm^3**

B = 4cm wide, 3cm high and 4cm deep = **48cm^3**

C = 8cm wide, 3cm high and 5cm deep = **120cm^3**

B

smallest

C

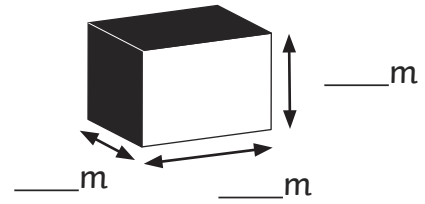
A

largest

Volume Word Problems

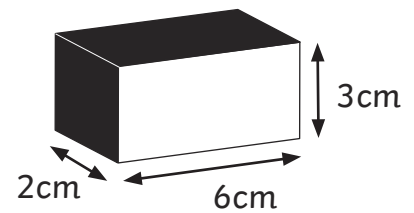
1. a) Label the box with the following dimensions:

- 8m wide
- 4m high
- 3m deep

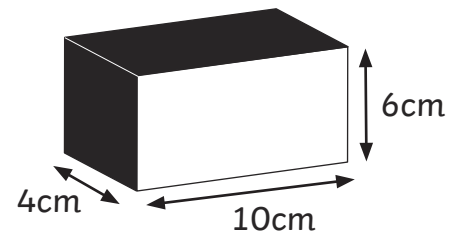


b) Calculate the volume of the box above.

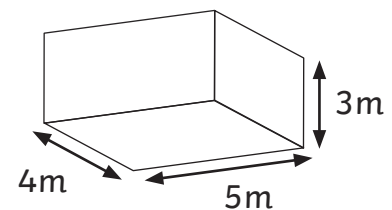
2. Liam builds a cuboid out of building bricks. It is 6cm wide, 3cm high and 2cm deep. What is the volume of the cuboid?



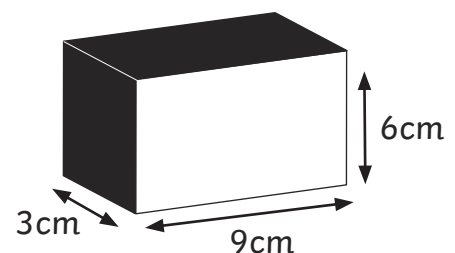
3. Abdul bought a jewellery box online. The box is 10cm wide, 6cm high and 4cm deep. What is the volume of the box?



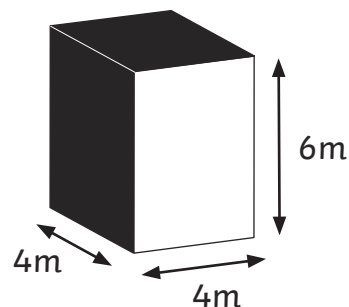
4. Daniel's kitchen is 5m wide, 4m long and 3m from floor to ceiling. What is the volume of Daniel's kitchen?



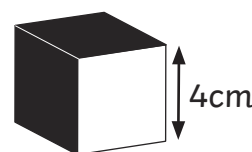
5. Eniola is posting a parcel that is 9cm wide, 6cm high and 3cm deep. What is the volume of the parcel?



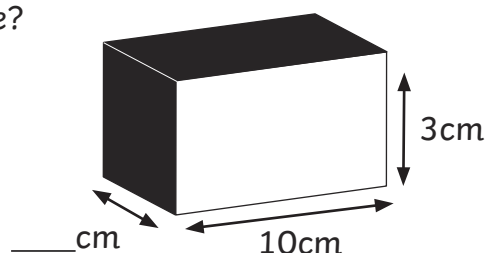
6. Aimee wanted to put her belongings in a storage unit which was 4m wide, 4m long and 6m high. What is the volume of the storage unit?



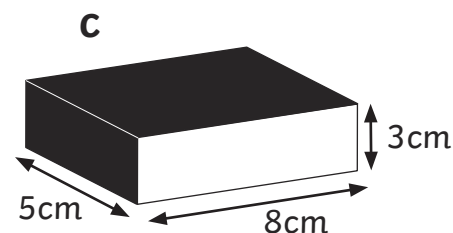
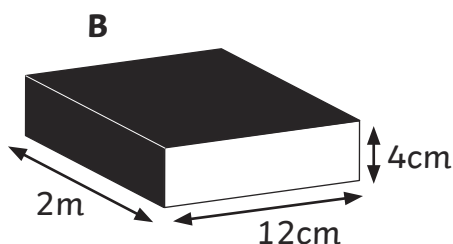
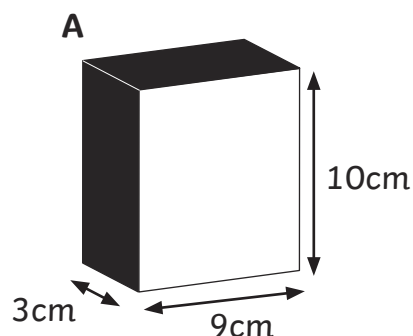
7. Chan was playing with a puzzle cube. He measured one side of the cube. The side measured 4cm. What is the volume of the puzzle cube?



8. Antoine had a pencil case that measured 120cm^3 . If it was 10cm wide and 3cm high, what was the depth of the pencil case?



9. Calculate the volume of the following Tupperware boxes and then put them in order from smallest to largest.



smallest

largest

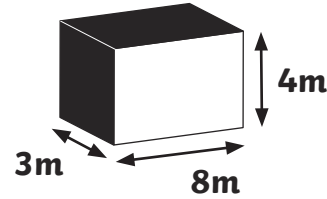
10. A truck has room to stack crates of 12m^3 .
What could the dimensions of each crate be?



Volume Word Problems Answers

1. a) Label the box with the following dimensions:

- 8m wide
- 4m high
- 3m deep



- b) Calculate the volume of the box above.

96m^3

2. Liam builds a cuboid out of building bricks. It is 6cm wide, 3cm high and 2cm deep. What is the volume of the cuboid?
 36cm^3
3. Abdul bought a jewellery box online. The box is 10cm wide, 6cm high and 4cm deep. What is the volume of the box?
 240cm^3
4. Daniel's kitchen is 5m wide, 4m long and 3m from floor to ceiling. What is the volume of Daniel's kitchen?
 60m^3
5. Eniola is posting a parcel that is 9cm wide, 6cm high and 3cm deep. What is the volume of the parcel?
 162cm^3
6. Aimee wanted to put her belongings in a storage unit which was 4m wide, 4m long and 6m high. What is the volume of the storage unit?
 96m^3
7. Chan was playing with a puzzle cube. He measured one side of the cube. The side measured 4cm. What is the volume of the puzzle cube?
 64cm^3
8. Antoine had a pencil case that measured 120cm^3 . If it was 10cm wide and 3cm high, what was the depth of the pencil case?
4cm
9. Calculate the volume of the following Tupperware boxes and then put them in order from smallest to largest.
- | | | | |
|---|---|---|---|
| A = 9cm wide, 10cm high and 3cm deep = 270cm^3 | <div style="border: 1px solid black; padding: 5px; display: inline-block;">B</div> | <div style="border: 1px solid black; padding: 5px; display: inline-block;">C</div> | <div style="border: 1px solid black; padding: 5px; display: inline-block;">A</div> |
| B = 12cm wide, 4cm high and 2m deep = 96cm^3 | | | |
| C = 8cm wide, 3cm high and 5cm deep = 120cm^3 | smallest | | largest |

10. A truck has room to stack crates of 12m^3 . What could the dimensions of each crate be?

$$2\text{m} \times 3\text{m} \times 2\text{m} = 12\text{m}^3$$

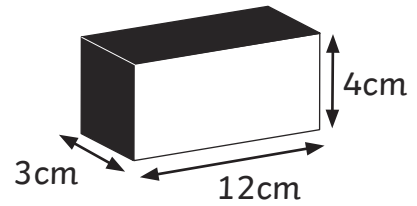
$$1\text{m} \times 6\text{m} \times 2\text{m} = 12\text{m}^3$$

$$1\text{m} \times 12\text{m} \times 1\text{m} = 12\text{m}^3$$

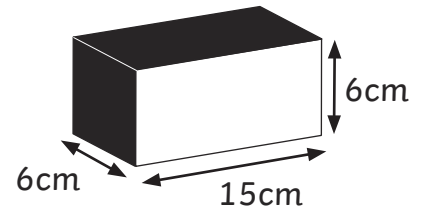
$$3\text{m} \times 4\text{m} \times 1\text{m} = 12\text{m}^3$$

Volume Word Problems

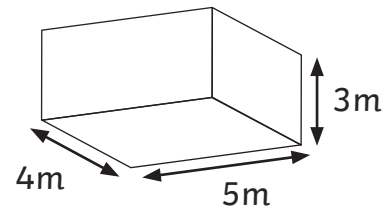
1. James is building a cuboid out of building bricks. It is 12cm wide, 4cm high and 3cm deep. What is the volume of the cuboid?



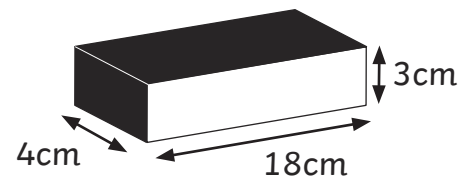
2. Mohammed bought a storage box online. The box is 15cm wide, 6cm high and 6cm deep. What is the volume of the box?



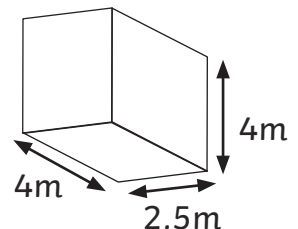
3. Eddo's bedroom is 5m wide, 4m long and 3m from floor to ceiling. What is the volume of Eddo's bedroom?



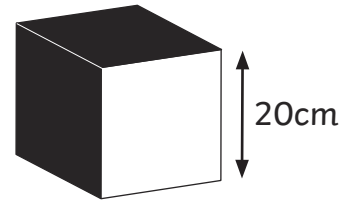
4. Maria is posting a parcel that is 18cm wide, 3cm high and 4cm deep. What is the volume of the parcel?



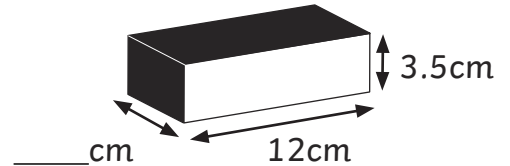
5. Lorenzo wanted to hire a storage unit which was 2.5m wide, 4m long and 4m high. What is the volume of the storage unit?



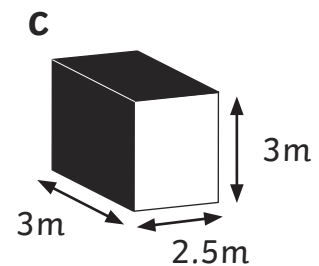
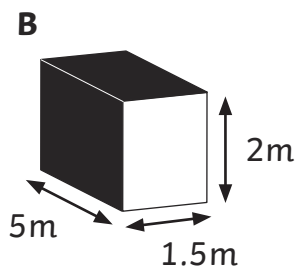
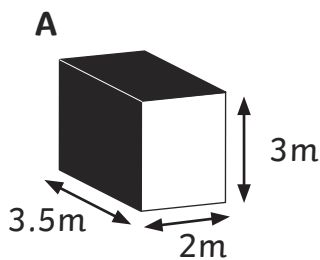
6. Liberty was building cube coffee table. She measured one side of the table. The side measured 20cm. What is the volume of the table?



7. Amina had a pencil case that measured 210cm^3 . If it was 12cm wide and 3.5cm high, what was the depth of the pencil case?



8. Calculate the volume of the following storage boxes and then put them in order from smallest to largest.

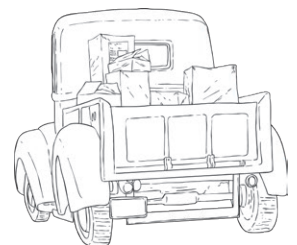


smallest



largest

9. a) A truck has room to stack crates of 48m^3 . What could the dimensions of each crate be?



- b) Which of the dimensions would be the most realistic for a crate?

Volume Word Problems Answers

1. James is building a cuboid out of building bricks. It is 12cm wide, 4cm high and 3cm deep. What is the volume of the cuboid?

144cm³

2. Mohammed bought a storage box online. The box is 15cm wide, 6cm high and 6cm deep. What is the volume of the box?

540cm³

3. Eddo's bedroom is 5m wide, 4m long and 3m from floor to ceiling. What is the volume of Eddo's bedroom?

60m³

4. Maria is posting a parcel that is 18cm wide, 3cm high and 4cm deep. What is the volume of the parcel?

216cm³

5. Lorenzo wanted to hire a storage unit which was 2.5m wide, 4m long and 4m high. What is the volume of the storage unit?

40m³

6. Liberty was building cube coffee table. She measured one side of the table. The side measured 20cm. What is the volume of the table?

8 000cm³

7. Amina had a pencil case that measured 210cm³. If it was 12cm wide and 3.5cm high, what was the depth of the pencil case?

5cm

8. Calculate the volume of the following storage boxes and then put them in order from smallest to largest.

A = 2m wide, 3m high and 3.5m deep = **21m³**

B = 1.5m wide, 2m high and 5m deep = **15m³**

C = 2.2m wide, 2.5m high and 3m deep = **16.5m³**

B

C

A

smallest

largest

9. a) A truck has room to stack crates of 48m³. What could the dimensions of each crate be?

Example answers:

$$6\text{m} \times 2\text{m} \times 4\text{m} = 48\text{m}^3$$

$$8\text{m} \times 2\text{m} \times 3\text{m} = 48\text{m}^3$$

$$48\text{m} \times 1\text{m} \times 1\text{m} = 48\text{m}^3$$

$$4\text{m} \times 4\text{m} \times 3\text{m} = 48\text{m}^3$$

$$6\text{m} \times 1\text{m} \times 8\text{m} = 48\text{m}^3$$

$$24\text{m} \times 2\text{m} \times 1\text{m} = 48\text{m}^3$$

$$12\text{m} \times 2\text{m} \times 2\text{m} = 48\text{m}^3$$

$$12\text{m} \times 4\text{m} \times 1\text{m} = 48\text{m}^3$$

$$16\text{m} \times 3\text{m} \times 1\text{m} = 48\text{m}^3$$

- b) Which of the dimensions would be the most realistic for a crate?

Accept either of the following:

$$6\text{m} \times 2\text{m} \times 4\text{m}$$

$$4\text{m} \times 4\text{m} \times 3\text{m}$$