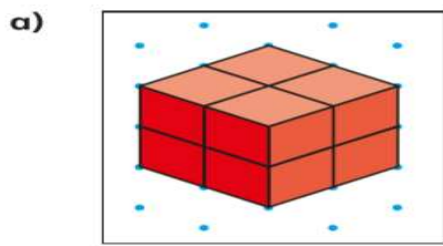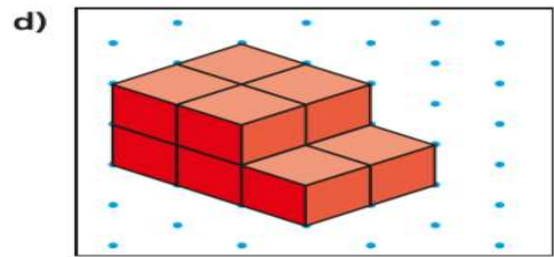This week we are revising perimeter, area and volume

LO: To calculate the volume (Bronze).
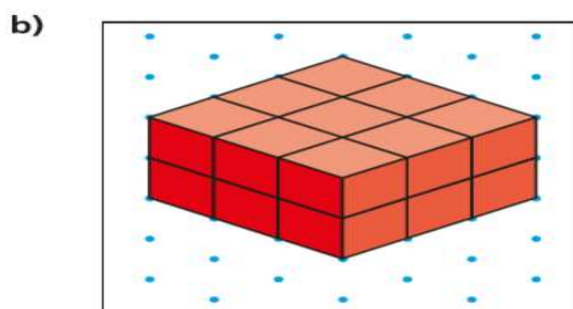
1) How many cubes are needed to make the following shapes?
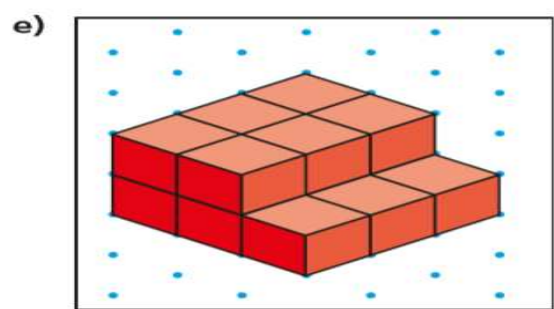
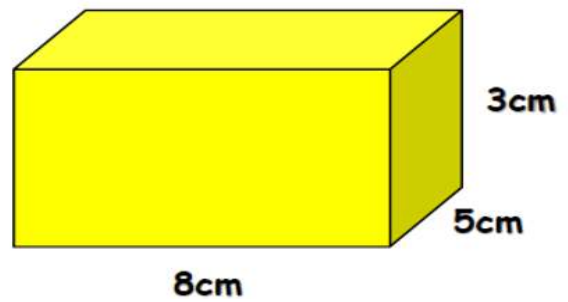**a)**

[ ] cubes

d)

[ ] cubes

b)

[ ] cubes

e)

[ ] cubes

2) Calculate the volume of these shapes

10cm
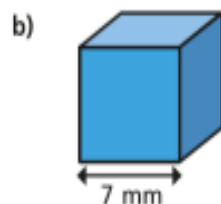10cm
10cm

3cm
5cm
8cm

3)

Calculate the volumes of the cubes.

a)

5 cm

volume = [ ] cm³

b)

7 mm
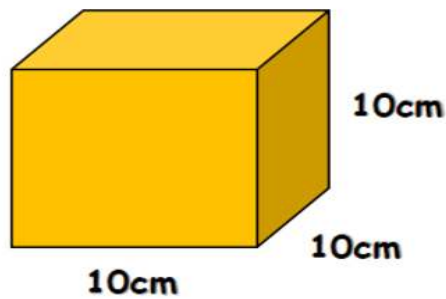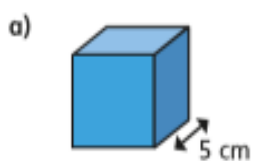
volume = [ ] mm³

4)

The volume of the cuboid is 60 m³

Find the missing length.

5 m

3 m

[ ] m
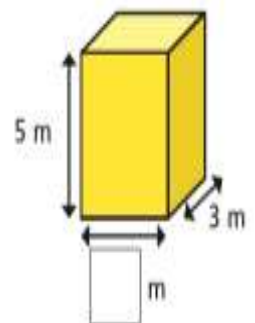
LO: To calculate the volume (Silver).

1) Here are two cuboids made of 1 cm³ cubes.

A   B
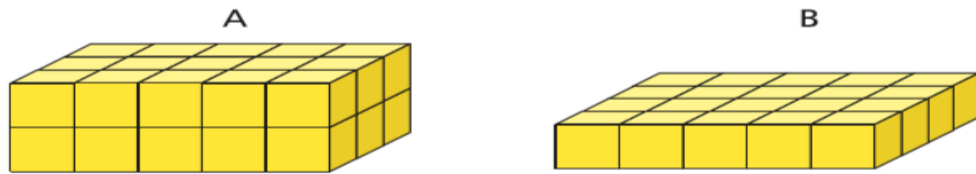
Which shape has the greater volume? _____

Show all your working to prove your answer.

2) Hannah is making cuboids using 24 cubes. How many different cuboids can she make?

Show your different cuboids using volume = length x width x height.

3) Calculate the volume of these cuboids

7cm

7cm

7cm

4cm

8cm

12cm

4)   Find the missing lengths from the information available.

Volume = 512

? cm

? cm

? cm

Volume = 165

3cm

? cm

11cm
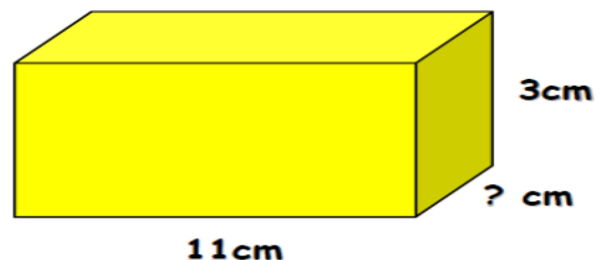
5) A box of matches measures 1cm by 4cm by 5cm. Boxes of matches are placed in a cardboard box measuring 15cm by 32cm by 40cm. How many boxes of matches fit into a cardboard box?
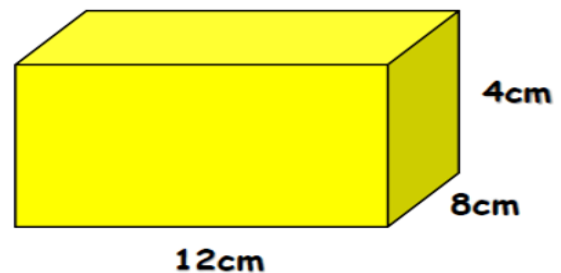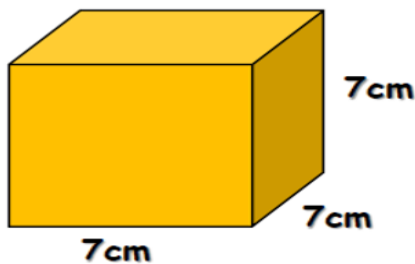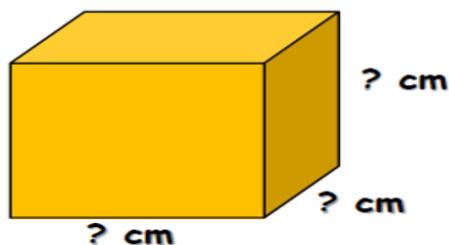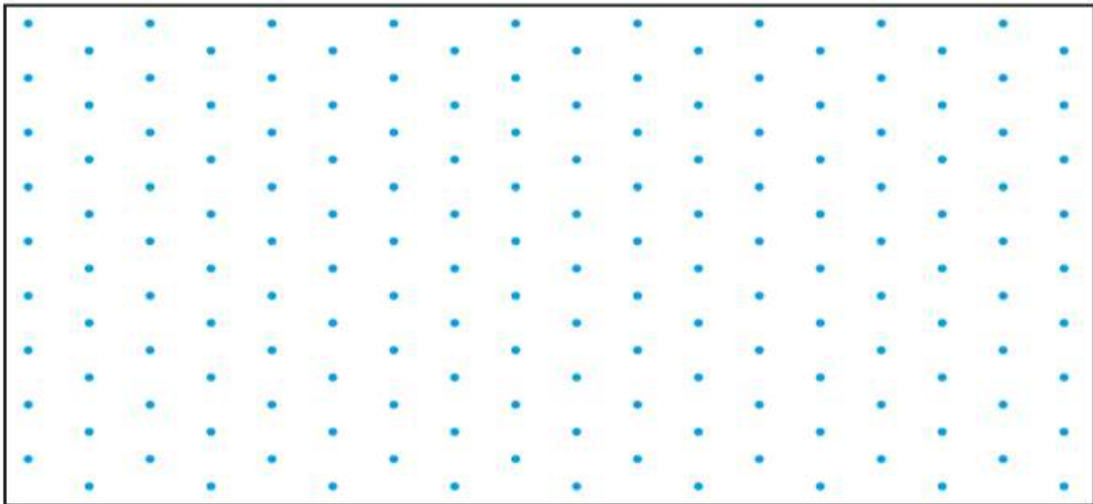
This week we are revising perimeter, area and volume
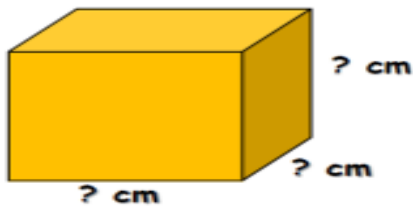
LO: To calculate the volume (Gold).

1)   A shape has a volume of 24 cm³

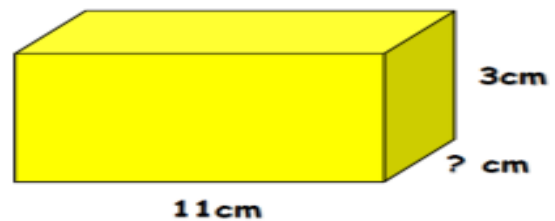Make two possible shapes from cubes and then draw them.

2)   ) Find the missing lengths from the information available.
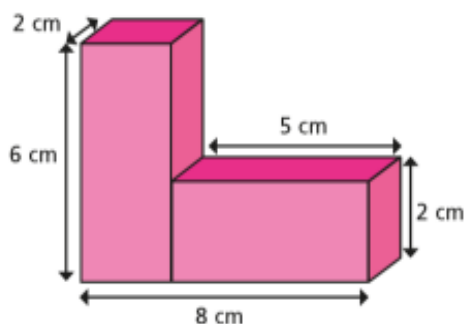
Volume = 512

? cm
? cm
? cm

Volume = 165

3cm
? cm
11cm

3) A book is 19cm wide, 26cm long and 2.5cm thick. There are 8 similar books placed on top of each other. What is the volume taken up by them?
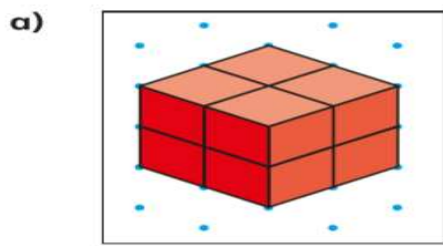
4)   Calculate the total volume of the shape.

2 cm
6 cm
5 cm
2 cm
8 cm

5) Sarah is calculating the volume of this cuboid: She has written the answer 960cm³. Can you work out the correct answer and explain where she went wrong.
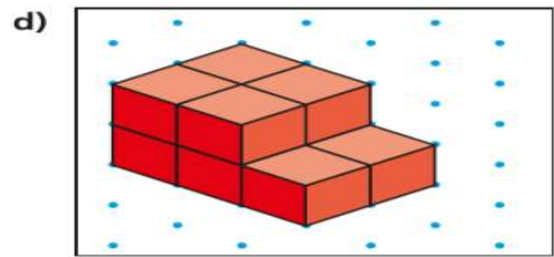
8cm
8cm
5cm
3cm
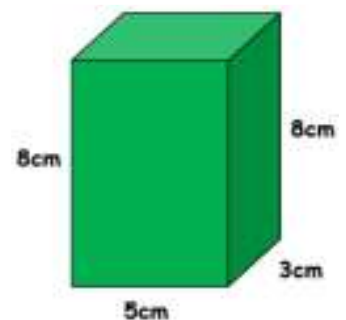
This week we are revising perimeter, area and volume
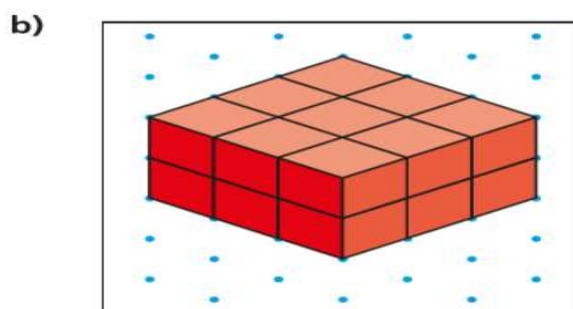
LO: To calculate the volume (Bronze) - answers

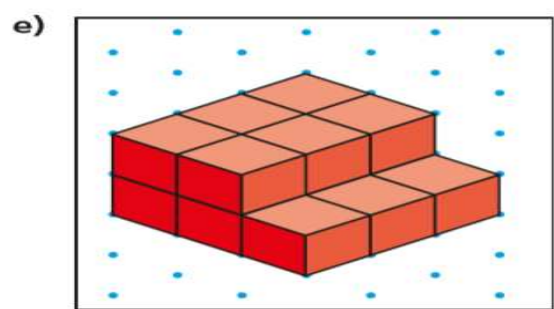1)   How many cubes are needed to make the following shapes?

a)

8 cubes

d)

10 cubes

b)
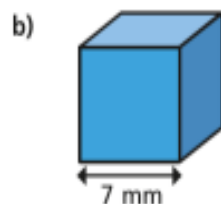
18 cubes

e)

15 cubes

2) Calculate the volume of these shapes

10cm
10cm
10cm

1000cm³

3cm
5cm
8cm

120cm³

3)

4)

Calculate the volumes of the cubes.

a)

5 cm

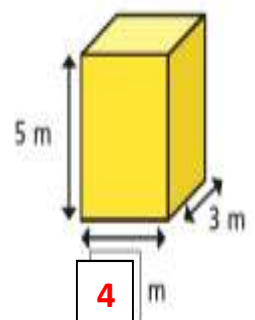volume = **125** cm³

b)

7 mm

volume = **343** mm³

The volume of the cuboid is 60 m³

Find the missing length.

5 m

3 m

4 m
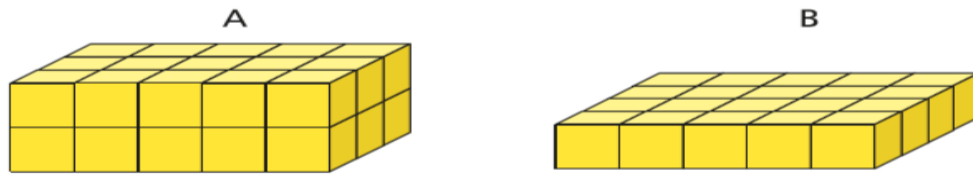
This week we are revising perimeter, area and volume

LO: To calculate the volume (Silver) - answers

1)

Here are two cuboids made of 1 cm³ cubes.

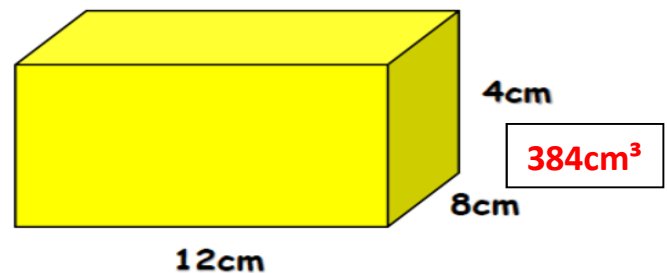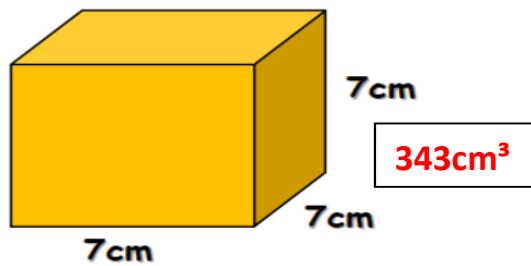A   B

Which shape has the greater volume? _____

| A |

Show all your working to prove your answer.

| 2 x 4 x 3 = 24 |

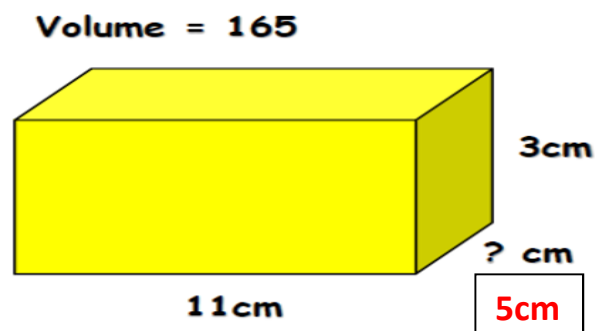2) Hannah is making cuboids using 24 cubes. How many different cuboids can she make?

Show your different cuboids using volume = length x width x height.

| Answers will vary |

3) Calculate the volume of these cuboids

7cm

| 343cm³ |

7cm

7cm

4cm

| 384cm³ |

8cm

12cm

4) Find the missing lengths from the information available.

Volume = 512

? cm

| 8cm |

? cm

? cm

Volume = 165

3cm

? cm

11cm

| 5cm |
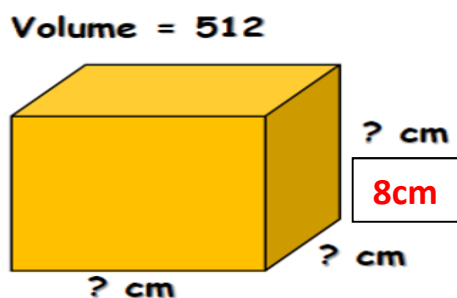
5) A box of matches measures 1cm by 4cm by 5cm. Boxes of matches are placed in a cardboard box measuring 15cm by 32cm by 40cm. How many boxes of matches fit into a cardboard box?

| 960 |

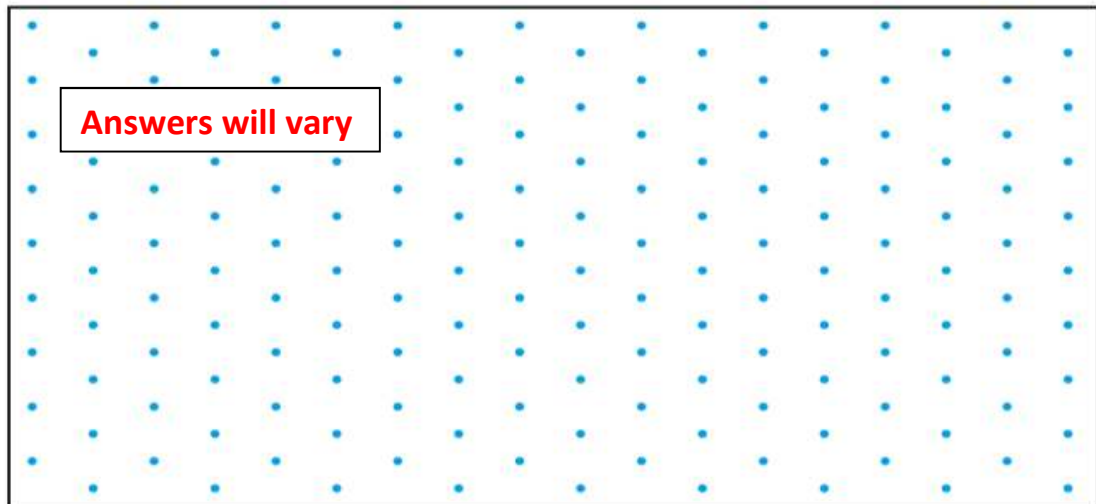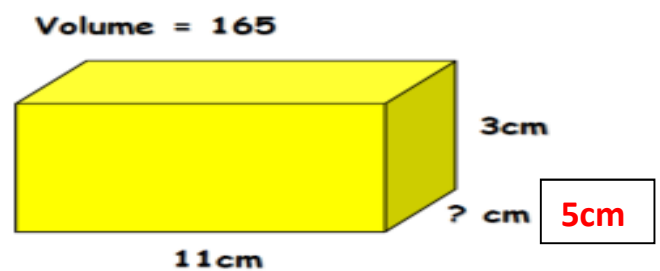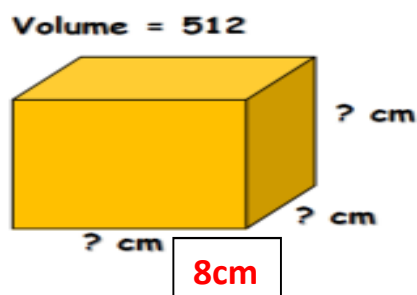This week we are revising perimeter, area and volume

LO: To calculate the volume (Gold) - answers

1) A shape has a volume of 24 cm³
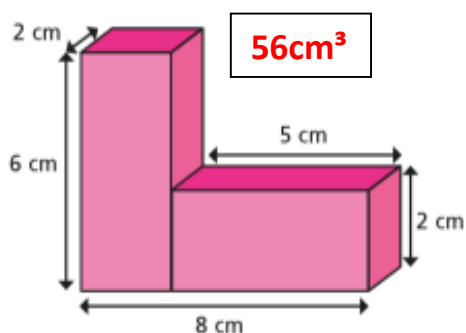
Make two possible shapes from cubes and then draw them.

Answers will vary

2) Find the missing lengths from the information available.

Volume = 512

? cm

? cm

? cm

8cm

Volume = 165

3cm

? cm

5cm

11cm

3) A book is 19cm wide, 26cm long and 2.5cm thick. There are 8 similar books placed on top of each other. What is the volume taken up by them?

9880cm³

4) Calculate the total volume of the shape.

2 cm

56cm³

5 cm

6 cm

2 cm

8 cm

5) Sarah is calculating the volume of this cuboid: She has written the answer 960cm³. Can you work out the correct answer and explain where she went wrong.

120cm³ because...

8cm

8cm

3cm

5cm