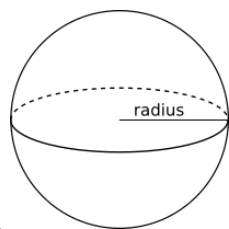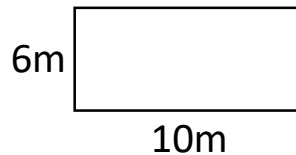The diagram shows a packet of three jams in a Christmas packet. Each jar is the same size.
Calculate the total amount of jam in the present.

Strawberry Jam | **Mrs Dunning's Secret Recipe** | **Raspberry Jam**

4 cm
7 cm
21 cm

The science department are making model planets.
The radius of the model Earth is $7cm$.
They are using a metal with density of 0.6 g/cm^3.
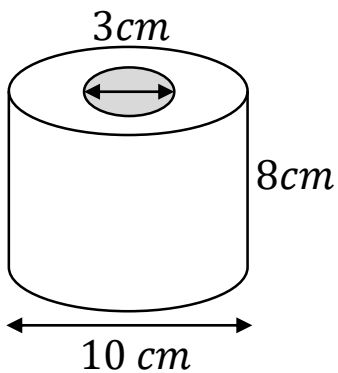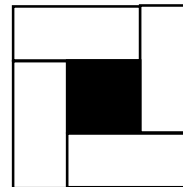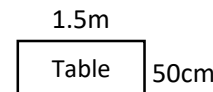Calculate the mass of the sphere.

radius

The diagram shows a patio in the shape of a rectangle.
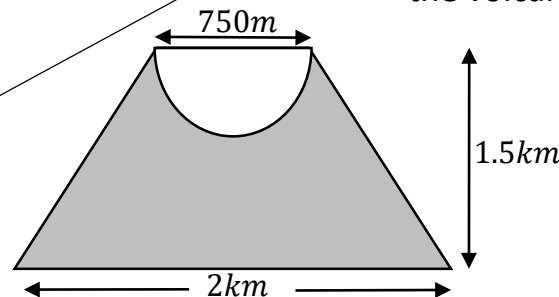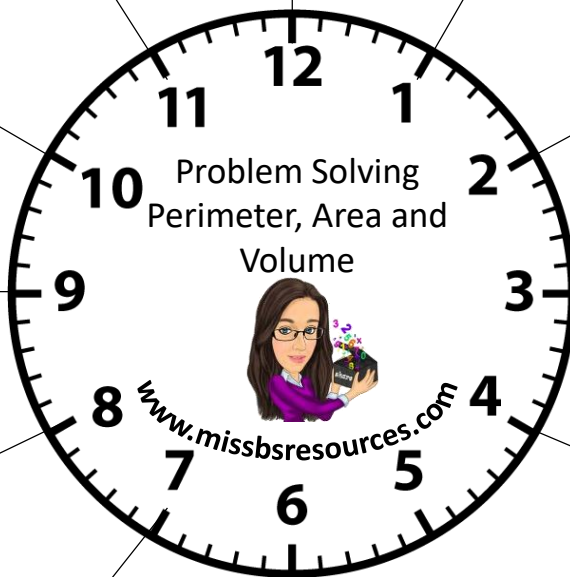
6m
10m

Sean is going to cover the patio with paving slabs. Each paving slab is a square of side $40cm$.

Sean buys 380 slabs, does he have enough?

Miss B redesigns her class room in to group tables. What is the area of the gap in the middle of the tables?
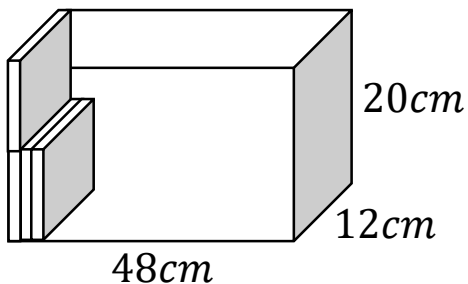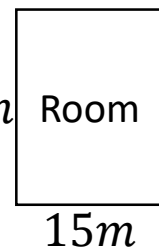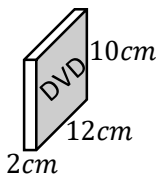
1.5m
Table | 50cm

The volcano holds magma in a crater. What is the cross-sectional area of the volcano?

750m
1.5km
2km

$3cm$
$8cm$
$10\ cm$

Calculate the volume of the toilet roll.

A DVD has measurements
$2cm \times 12cm \times 10cm$.
How many DVD's can fit in the box?

Problem Solving Perimeter, Area and Volume

www.missbsresources.com
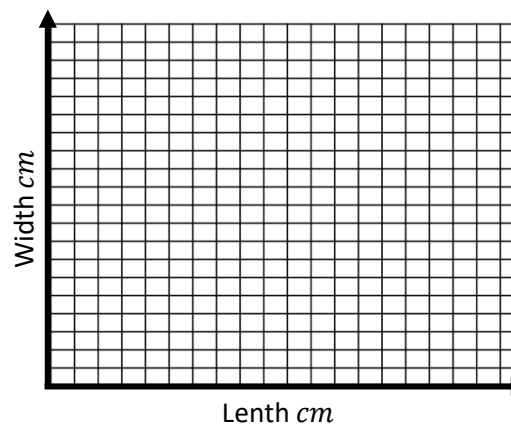
Adam decides to cover the floor of a room with floorboards.
A shop sells floorboards with dimensions of $150cm \times 20cm$ in packs of 5 for £23. His floor is a rectangular shape with length $15m$ and width $18m$.
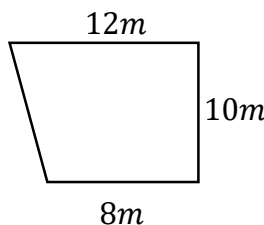How much will it cost him to lay the floorboards in his room?

$20cm$
$12cm$
$48cm$

$10cm$
DVD
$12cm$
$2cm$
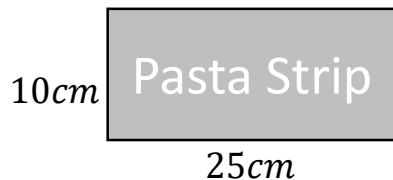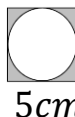
It's possible to draw many rectangles that have an area of $18cm^2$.
Plot the possible integer dimensions of the rectangle on the graph.

$18m$ | Room
$15m$

12m
10m
8m

When making ravioli a chef needs to cut circles out of pasta a waste as little pasta as possible. The chef has a cutter that cuts the ravioli.

Pasta Strip
$10cm$
$25cm$
$5cm$

What is the area of the wasted pasta?

The diagram shows a panel of a ship. It needs painting with tar on the outside to prevent corrosion when in the sea. Each tin of paint covers $5m^2$ and costs £198.
How much does it cost to paint the panel?

Width cm
Lenth cm

What is the largest possible perimeter of the rectangle with both an integer length and width?