Problems of the Day 2020

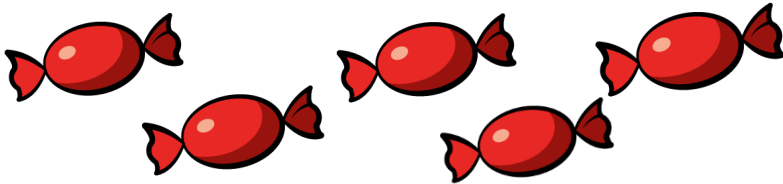**1** Fill in the missing numbers.

10 less than 46 is [ ]

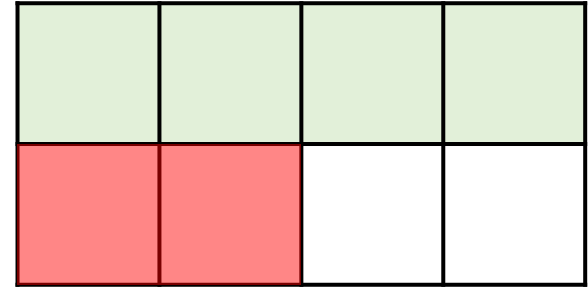[ ] more than 30 is 35

2

This is half of my sweets

How many sweets does Teddy have?

3 Lucy shades in part of a rectangle.

She shades some more squares.

$\frac{3}{4}$ of the rectangle is now shaded.

How many more squares did Lucy shade?

White Rose Maths

Problems of the Day 2020

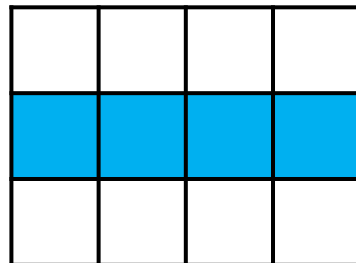**1** Ron has these digit cards.

| 1 | 4 | 6 |

He uses two of the cards to make a 2-digit number.

How many even 2-digit numbers can he make?

2 One third of the shape is shaded. True or false?

3 Tick all the calculations that have an answer greater than 40

$43 + 39$

$35 - 6$

$23 + 28$

10×7

$24 \div 2$

Did you tick any without working them out?

White Rose Maths

Problems of the Day 2020

1 Which of these numbers is closest to 10?

3   **13**

Which of these numbers is closest to 50?
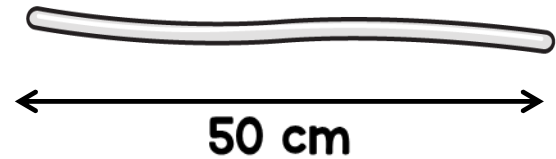
75   **28**

2 What are the missing numbers?

$64 = 10 + \boxed{}$

$39 = 100 - \boxed{}$

3 Annie has an 80 cm piece of wire.

She cuts the wire into two pieces.
The long piece is 50 cm long.

50 cm

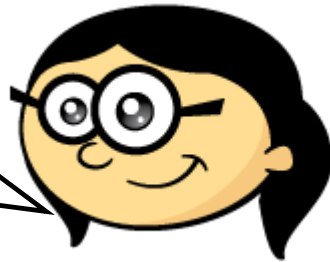She cuts the smaller piece into 2 more pieces of equal size.

How long is one of these pieces?

White Rose Maths

Problems of the Day 2020

Day 4

1 What are the missing digits?

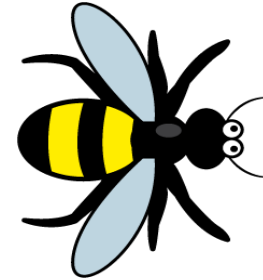$$3\boxed{} + \boxed{}5 = 76$$

2 Annie and Ron each think of a number.

I'm thinking of the number 6

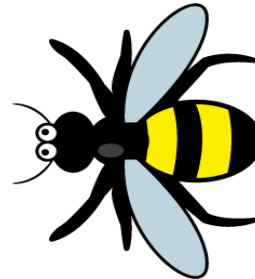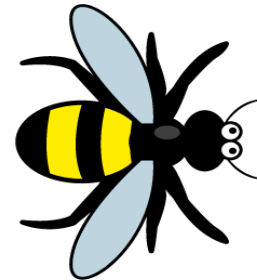The sum of their numbers is 25

What is Ron's number?

3 The bee makes a half turn.

Which way is the bee now facing?

White Rose Maths

Problems of the Day 2020

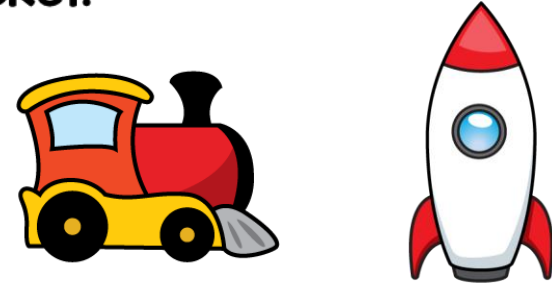**1** There are 5 marbles in a bag.

Ron has 10 bags of marbles.

He puts 1 more marble in each bag.

How many marbles are there in total now?

2 Work out the missing digit.

$$5 + \boxed{} + 4 = 16$$

3 A toy train costs £4 more than a rocket.

The train costs £15

How much do the train and the rocket cost in total?

White Rose Maths

1 Here is how much it costs to go to the zoo.

Children
£5

Adults
£10

Mr Jones and his 3 children go to the zoo.

How much does it cost them altogether?

2 If

$$\triangle + \triangle = 12$$
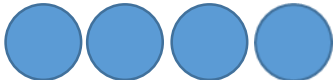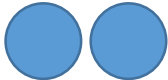
$$\heartsuit + \triangle = 19$$

What is the value of $\heartsuit$?

3 What are the missing numbers?

$$\boxed{} \times 10 = 40$$

$$\boxed{} \div 10 = 7$$

White Rose Maths

Problems of the Day 2020

1 The pictogram shows the number of children who walk to school each day.

Monday	⬤⬤⬤⬤
Tuesday	⬤⬤⬤⬤⬤◖
Wednesday	⬤⬤

⬤ = 2 children

There are 20 children in the class.

How many children did not walk to school on Tuesday?

2 These pairs of numbers all have the same total.

50 30

20   80
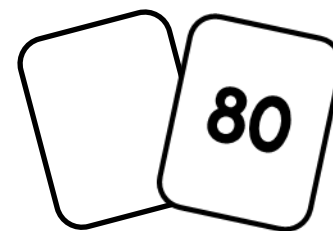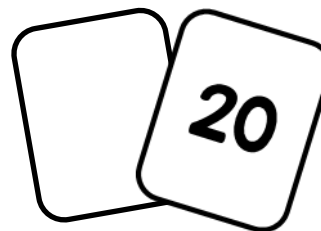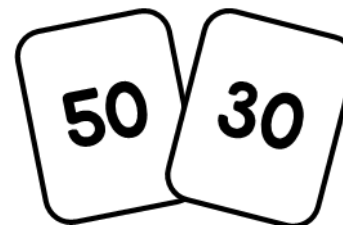
Work out the missing numbers.

White Rose Maths

1 Mary makes toys

- On Monday she makes 7 toys.
- On Tuesday she makes 8 toys.
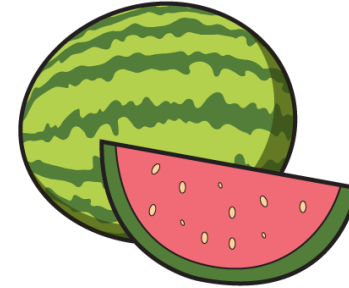
By Wednesday she has to make 20 toys in total.

How many toys does Mary need to make on Wednesday?

TOY FACTORY

2 Tom has £20
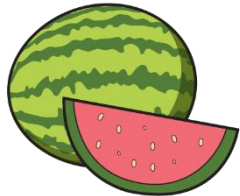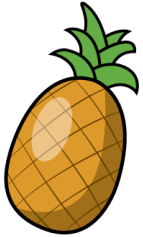
Melon
£2 each

He buys 7 melons.

How much money does he have left?

3 Circle 3 numbers that sum to 12

6   5   4   3   2   1

White Rose Maths

Problems of the Day 2020

1 The cost of a pineapple is twice the cost of a melon.

£4 each

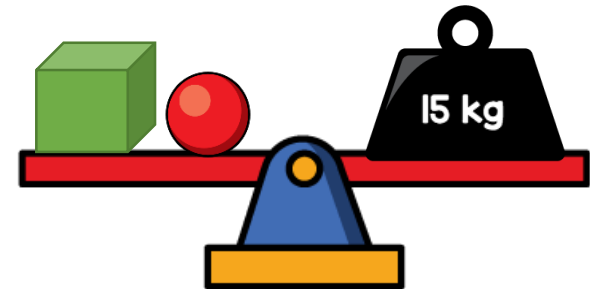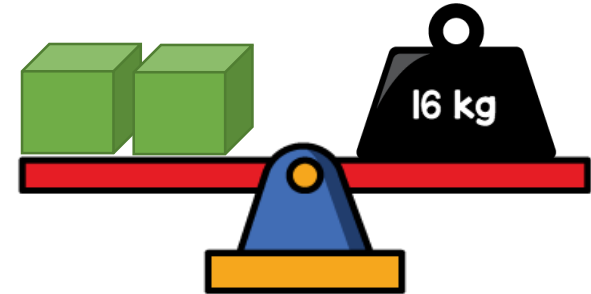How much do the pineapple and melon cost altogether?

2 Tommy thinks of a two-digit number.

My number ends in a 5

Does Tommy's number have to be odd? Explain your answer.

3 Gina balances some scales.

16 kg

15 kg

What is the mass of the sphere?

White Rose Maths

1 Here are some digit cards.

| 1 | 4 | 5 |

Mary makes a 2-digit number using two of the cards.

How many different numbers can she make?

2 Complete the number sentences.

$60 + \boxed{} = 79$

$15 + 12 = 12 + \boxed{}$

3 Tom balances some scales.

70 kg

40 kg

What is the mass of the sphere?

White Rose Maths
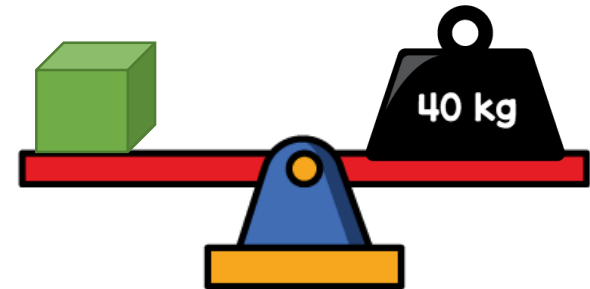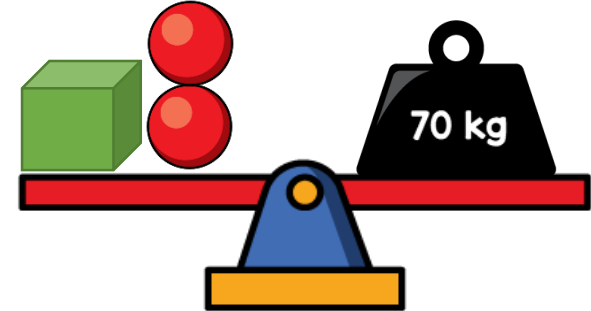
1 Use $<$, $>$ or $=$ to make these number sentences correct.

$$5 \times 7 \bigcirc 40$$

$$6 \times 2 \bigcirc 7 \times 2$$

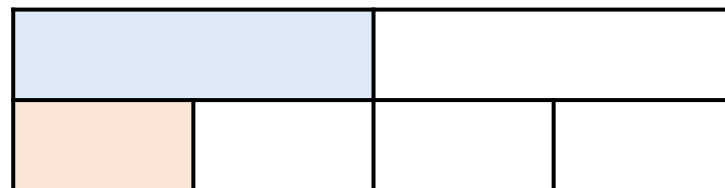$$10 \div 2 \bigcirc 12 \div 2$$

2 There are 50 children in a school.
15 of the children are girls.
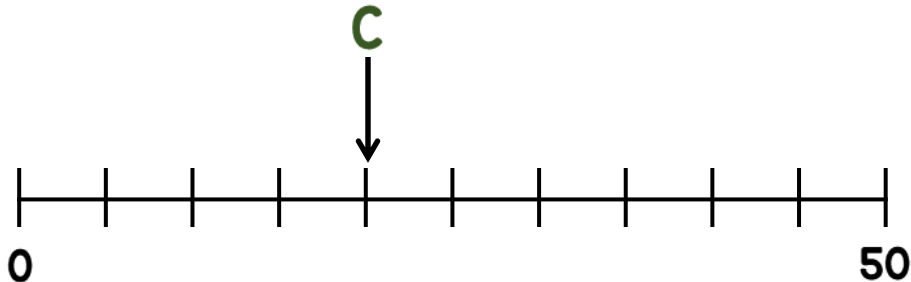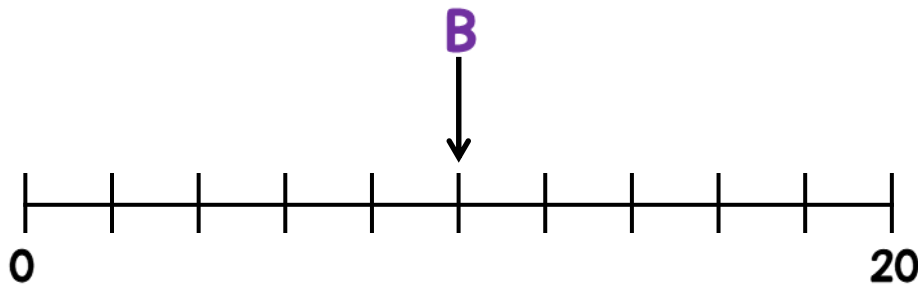How many more boys than girls are in the school?

3 Mr Patel writes a number on the board.

- Lee finds $\frac{1}{2}$ of the number.
- Kim finds $\frac{1}{4}$ of the number.
- Lee's answer is 5 more than Kim's.

What is the number Mr Patel started with? This bar model may help you.

White Rose Maths

1 Given than $A + B = C$

Draw an arrow pointing to C

A
0 10

B
0 20

C
0 50
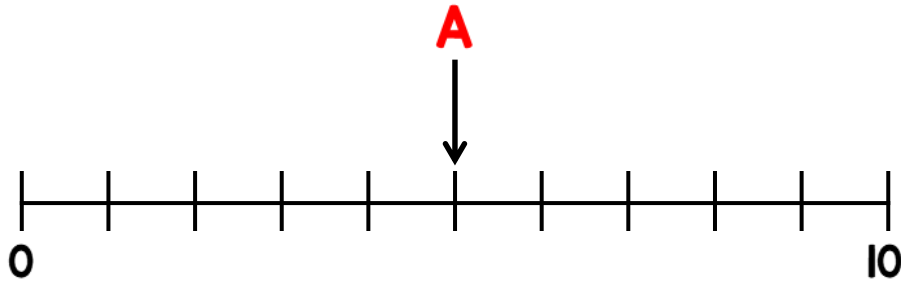
2 Amir has a box of 50 counters.

12 of the counters are red.

17 of the counters are blue.

The rest of the counters are yellow.

Which coloured counter are there more of?

3
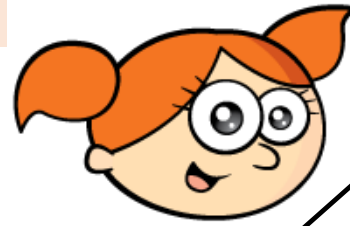
When I share my stickers between me and my 4 friends, we all get 7 stickers.

How many stickers did Lisa share out?

White Rose Maths

Problems of the Day 2020

1 Sam has £50

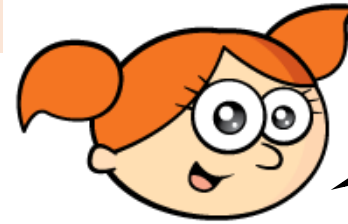He buys this cap and jumper with his money.

£19

£15

How much money does he have left?

2 One half of a number is 6

What is double the number?

3

I have 42 stickers

I have 60 stickers

Mo gives Alex some stickers. They now have the same number of stickers.

How many stickers does Mo give Alex?

White Rose Maths

Problems of the Day 2020

1 Which of these are equal to 15?
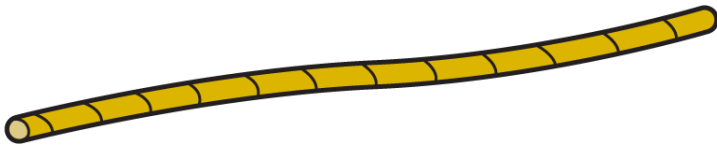
$$10 + 5$$

$$5 + 5 + 5$$

$$20 - 5$$

$$1 + 5$$

2 A rope measures 30 metres.

The rope is cut into 10 equal sized pieces.
What is the total length of 5 of these pieces?

3 Danny has two boxes of sweets.

40 SWEETS

40 SWEETS

He puts the sweets into smaller bags.

There are 5 in each bag.

5 SWEETS

How many bags can Danny fill using all the sweets?

White Rose Maths

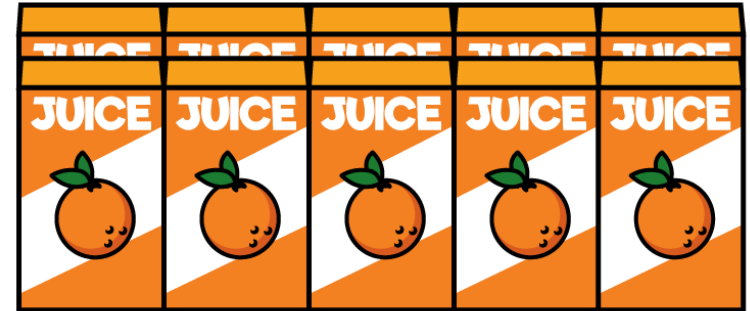# Problems of the Day 2020

1 In a box

- $\frac{1}{4}$ of the apples are green.
- The rest are red.
- There are 5 green apples.

How many apples are red?
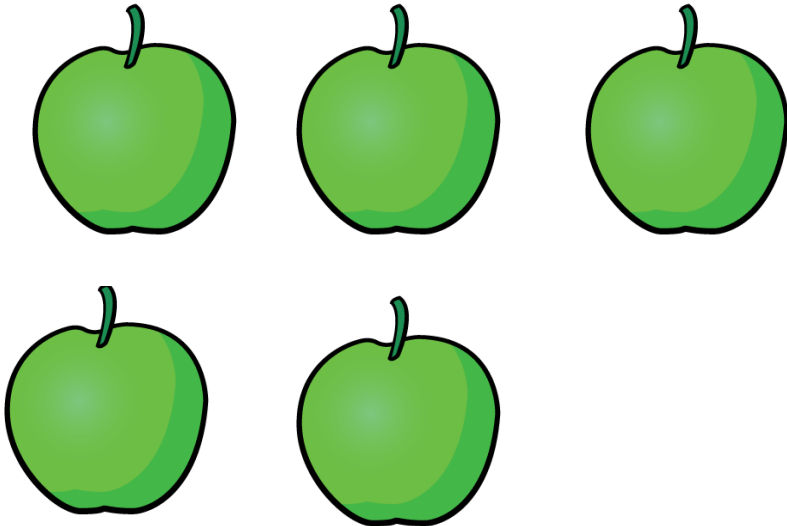
2 Amir has 10 cartons of juice.

Each carton holds 2 litres of juice.

How much juice is in 7 cartons?

White Rose Maths

1 Here are 3 number patterns.

0	5	10	15	20		30

27	37		57	67	77	87

32	30	28	26		22	20

What is the sum of the three missing numbers?

2 Work out the value of each symbol.

$$\triangle + \triangle = 18$$

$$\triangle + \Diamond = 30$$

$$\bigstar - \Diamond = 10$$

Problems of the Day 2020

1 Mary measures the mass of 2 cylinders.
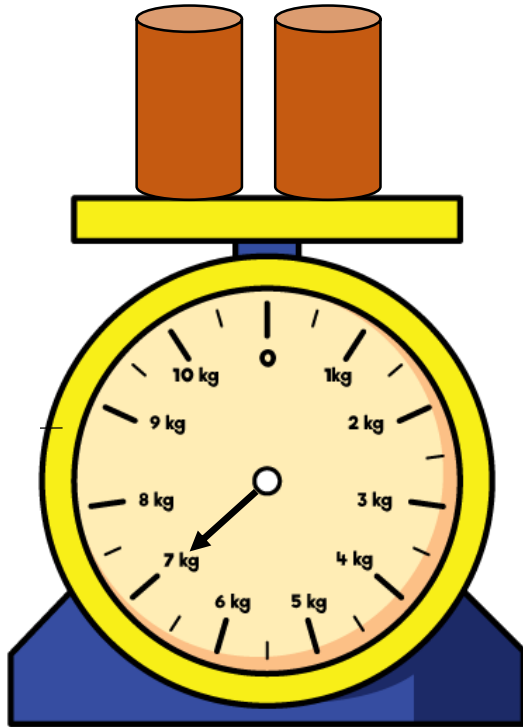
What is the mass of 10 of these cylinders?

2 Jack and Dora each have some money.

I spent half of my money.

I spent £12

They have the same amount left.

Dora spent £20

How much money did Jack have at the start?

White Rose Maths

Problems of the Day 2020

1 Tim has two packs of pop.
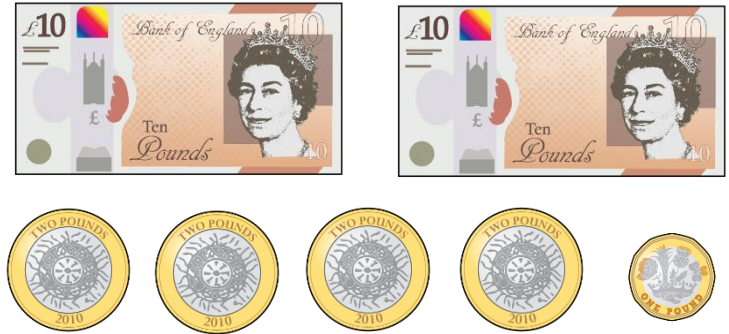
Each pack holds 24 cans.

Sally has five smaller packs.

Each of her packs holds 6 cans.

How many more cans of pop does Tim have?

2 Here is some money.

The money is shared between 5 girls and 2 boys.

Each girl receives £3

How much money does each boy receive?

White Rose Maths

1 Mo has six 5p coins.

He also has five 10p coins.

He buys this lolly.

How much money does he have left?

4qp

2 Mrs Green bakes muffins.
She sells them in her shop.

- On Monday she bakes 30 and sells 18
- On Tuesday she bakes twice as many muffins but has the same amount left.

How many muffins did she sell on Tuesday?

White Rose Maths

1 Complete these number sentences.

$$5 + 5 + 5 + 5 = \boxed{} \times 5$$

$$2 + 2 + 2 + 2 + 2 = \boxed{} \times 5$$

$$10 + 10 + 10 = \boxed{} \times 5$$

$$5 - 5 = \boxed{} \times 5$$

2 Lou has 5 bananas.

Dan has 8 times as many.

How many bananas do they have in total?

3 A bag contains 100 counters.
Susie takes out 26 counters.
Mark takes out 39 counters.
How many counters are left in the bag?

White Rose Maths