

Green challenge- 1 and 2 step problems involving finding 50%, 25% and 10%

A grocer has 60kg of potatoes. In one day, he sells 50% of the potatoes. What mass of potatoes does he sell?

30kg

A decorator buys 24 litres of paint. When he finishes painting, there is 25% of the paint left. How much paint is left?

6 litres

Amit reads a book with 250 pages. He reads 10% of the book each day. How many pages does he read each day?

25 pages

A collection is made for local charities, which raises £60. 10% of the money is given to a children's charity. How much does the children's charity receive?

£6

Niamh enters the 500 words story competition. She writes 10% of the required words on the first day. How many words has she left to write?

450 words left

A builder has 600kg of bricks delivered to build an extension to a house. 50% are used on the first day, and 25% are used on the second day. How many bricks are left after the second day?

150kg left

25% of the 240 children in a school come to breakfast club. There are enough places for another 10% of the children to attend the breakfast club. How many places are there at the breakfast club?

84 places

3000 people attend a football match. 25% of the crowd are children. 10% of the children are under five years old. How many children under five years old are in the crowd?

75 children under 5

Orange challenge- 1 and 2 step problems involving finding 50%, 25% and multiples of 10%

A florist has 85m of florist wire. In one day 10% of the wire is used. How much wire is left?

76.5m

A collection is made for local charities, which raises £800. 20% of the money is given to a children's charity. How much does the children's charity receive?

£160

A baker has 2000kg of white flour and 1500kg of wholemeal flour. The flour is mixed together and 50% is used to make bread. How much flour is used to make bread?

1750kg

An athlete runs 30 miles a week in three runs. On one day, the athlete runs 40% of the mileage. How long does the athlete run on this day?

12 miles

Some children are asked to hand out some felt pens to each class. Each class receives 25% of the felt pens. Each class receives 35 pens. How many pens are given out?

140 pens

A supermarket stocks 300kg of potatoes. 25% of the potatoes are sold in 5kg bags. The rest are sold in 1.5kg bags. What mass of potatoes are sold in 1.5kg bags?

225kg

A farmer harvests 850kg of parsnips. 30% go to the local market and 50% go to a local supermarket. What mass of parsnips are left?

170kg

A library has 2500 books. 40% of the books are fiction. How many books are not fiction books?

1500 books

Red challenge- 2 step problems involving finding any percentage of an amount

A school orders 80 packs of pencils. Each pack contains 12 pencils. 10% of the pencils are given out the day they arrive in school. How many pencils are given out on that first day?

96

A sunflower grows to be 200cm tall. After four weeks, it was 37% of this height. How tall was the sunflower after four weeks?

74cm

A florist has 25m of florist wire. In one day 73% of the wire is used. How much wire is used?

18.25 m

A school orders 1460 exercise books. 30% of the books have squared paper, 45% have lines and the remaining books are plain. By the end of the first term, all the squared and lined books have been used, and 80% of the plain books have been used. How many books are left?

73 books

There are 450 chairs in a school. 80% of the chairs are in good condition. Of the remaining chairs, 40% need to be thrown away. How many chairs need to be thrown away?

36 chairs

The population of a town is 24 400. 25% of the people are children. 10% of the children are under the age of two. How many children under the age of two live in the town?

610

A sunflower is measured at the beginning of June and is 40cm tall. The sunflower grows by 25% each month for three months. What height is the sunflower to the nearest centimetre at the beginning of September?

78 cm