

Problems of the Day 2020

Day 4

1 What are the missing digits?

$$\boxed{3} \boxed{6} + \boxed{7} \boxed{5} = \boxed{1} \boxed{1} \boxed{1}$$

2 Annie and Ron each think of a number.

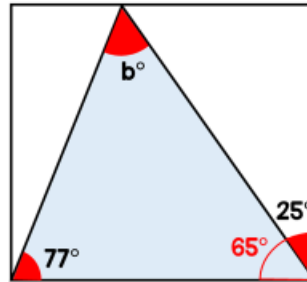
I'm thinking of the number 6



The product of their numbers is 762
Work out Ron's number.

$$762 \div 6 = 127$$

3 Find the size of angle b.



$$90 - 25 = 65$$

$$65 + 77 = 142$$

$$180 - 142 = 38$$

$$b = 38^\circ$$

White
Rose
Maths

Problems of the Day 2020

Day 5

1 Marbles are put into bags of 10



- 67 bags of marbles are packed.
- 3 more marbles are added to each bag.

How many marbles are there in total now? $67 \times 13 = 871$

2 Work out the missing digits.

$$\boxed{5} \times \boxed{7} \times \boxed{3} = 105$$

$$105 \div 5 = 21$$

3 A toy train costs three times as much as a rocket.



The total cost of the train and rocket is £52

How much does the train cost?

$$52 \div 4 = 13$$

$$13 \times 3 = 39$$

The train costs £39

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Day 6

- 1 The table shows the ages of people in a theme park.

Age	Number of people
Under 18	126
18 - 60	195
Over 60	38

These are the entry costs.

How much money did the theme park make from entry costs? **£2,846**



$$126 \times 5 = 630 \quad 38 \times 7 = 266$$

$$195 \times 10 = 1,950 \quad 630 + 1,950 + 266 = 2,846$$

Given that $100 \div 2 = 50$

$$\triangle + \triangle + \star + \star = 100$$

$$\heartsuit + \heartsuit + \triangle + \star = 78$$

Work out the value of the \heartsuit

$$78 - 50 = 28 \quad 28 \div 2 = 14$$

- 3 What are the missing numbers?

$$\boxed{4.2} \times 10 = 42$$

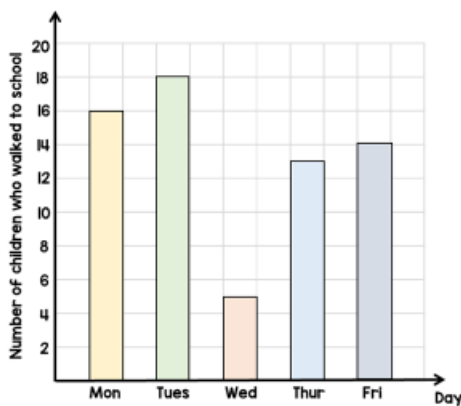
$$\boxed{420} \div 10 = 42$$

White Rose Maths

Problems of the Day 2020

Day 7

- 1 There are 25 children in a class. The bar chart shows the number of children in the class who walk to school each day.



- (a) What percentage of the class walked to school on Thursday?
 $13 \times 4 = 52$ **52%**
- (b) One of the days it rained. Which day do you think it was? Explain to your friend.
Wednesday, because the least number of children walked.

- 2 Order the following numbers. Start with the smallest.

$$\boxed{3.1} \quad \boxed{\frac{18}{5}} \quad \boxed{3\frac{1}{4}}$$

$$\frac{18}{5} = 3\frac{3}{5} = 3.6 \quad 3\frac{1}{4} = 3.25$$

$$3.1, 3\frac{1}{4}, \frac{18}{5}$$

White Rose Maths

1 Workers in a factory make toys.

- On Monday they make 2,350 toys.
- On Tuesday they make 235 more toys than they did on Monday.

By Wednesday they have to make 7,500 toys in total.

How many toys do they need to make on Wednesday to make 7,500 in total?

$$2,350 + 235 = 2,585$$

$$2,350 + 2,585 = 4,935$$

$$7,500 - 4,935 = 2,565$$

They need to make 2,565 toys on Wednesday.

2



Carrots
£1.80 per kg

How much does 250 g of carrots cost? $1.80 \div 4 = 0.45$

250 g of carrots cost 45p

3



Parsnips
£2.60 per kg

How much does 300 g of parsnips cost? $2.60 \div 10 = 0.26$

$$0.26 \times 3 = 0.78$$

300 g of parsnips cost 78p