

Number Nest Weekly Challenge



A jar contains 280 smarties. $\frac{2}{7}$ are purple, 40 are blue, $\frac{3}{7}$ are orange and the rest are green.

- a) How many are green? (Give your answer as a number, not a fraction!)

$\frac{1}{7}$ are green which means there are 40 green smarties.

- b) How many are not purple? (Give your answer as a number, not a fraction!)

If $\frac{2}{7}$ are purple. $\frac{5}{7}$ are not purple.

$$40 \times 5 = 200$$

There are 200 smarties that are not purple.

- c) In the morning, 5 children take 9 smarties each. In the afternoon, 4 children take 16 smarties each. How many smarties are left in the jar at the end of the day?

$$5 \times 9 = 45$$

$$4 \times 16 = 64$$

$$280 - (45 + 64) = 171$$

171 smarties are left in the jar at the end of the day.

- d) At the end of the week, all the smarties have been eaten. A new delivery arrives on the following Monday. Four boxes are delivered containing 8 jars in each. How many smarties are there altogether?

$$4 \times 8 \times 280 = 8960$$

8960 smarties are delivered.

- e) The smartie company decide to use larger jars to save money. The new jars hold 550 smarties each. How many of the new sized jars would be needed to fit all the smarties delivered to school on the Monday?

$$8960 \div 550 = 16.29$$

They would need 17 jars.

- f) Jimmy has £7 to spend on smarties. Small tubes cost 10p each. Large tubes cost 35p each. He decides to buy only small tubes or large tubes. How many more small tubes than large tubes can he buy for £7?

$$\text{Small tubes} - 700p \div 10p = 70$$



Large tubes - $700p \div 35p = 20$

$70 - 20 = 50$

They can buy 50 more small tubes.



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