## Day 4

## **Maths**

A

A row of tiles is laid with this repeating pattern.



- 1 How many blue tiles are there if there are:
  - a) 12 red tiles
- b) 30 red tiles?
- 2 How many red tiles are there if there are:
  - a) 12 blue tiles
- b) 40 blue tiles?

In a raffle there is one prize for every 20 tickets.

- 3 How many prizes are there if:
  - a) 120 tickets are sold
  - b) 500 tickets are sold?
- 4 How many tickets have been sold if there are:
  - a) 9 prizes
- b) 17 prizes?
- 5 In Year 6 the ratio of dinners to packed lunches is 2:1. Forty children have a dinner. How many have a packed lunch?
- 6 In a class the ratio of boys to girls is 3:4. There are 16 girls. How many boys are there?
- 7 The ratio of red to green apples in a bowl is 3:1. If there are 15 red apples, how many apples are green?
- At a market the ratio of blue jeans sold to black jeans sold is 7:2. If 6 black jeans are sold, how many blue jeans are sold?



- B
- 1 In one season the ratio of goals for to goals against in Chelsea's matches was 5:3. If Chelsea scored 80 goals, how many did they let in?
- 2 In November the ratio of wet days to dry days was 4:1. How many days were wet?



- 3 In a survey of trees in a wood the ratio of beech trees to other trees was 2:5. If there were 14 beeches, how many other types of tree were there?
- 4 In a supermarket the ratio of male to female employees is 2:3. If there are 36 female employees, how many men work there?
- During a lesson lasting one hour the ratio of the time Aidan spends working to the time he spends day-dreaming is 3:7. How long does he actually work?
- 6 In a hospital ward the ratio of nurses to patients is 2:9. If there are 63 patients, how many nurses are there?
- A cashier in a bank counts £1300 in £10 and £20 notes only. The ratio £10 notes: £20 notes is 3:5.

  How many are there of each note?
- 8 Share:
  - a) 21 sweets in the ratio 3:4
  - b) £1.20 in the ratio 2:1
  - c) 1 litre of drink in the ratio 2:3
  - d) 36 strawberries in the ratio 4:5
  - e) £90 in the ratio 3:15
  - f) 480 g of nuts in the ratio 5:3.

- F
- 1 A photocopier enlarges in a ratio of 5:7. If the original document was 30 cm long and 20 cm wide, what are the dimensions of the photocopy?
- 2 In a bakery the ratio of large loaves to small loaves is 8:3. If there are 96 large loaves, how many small loaves are there?
- 3 On a plane the ratio of adult to child passengers is 15:2. If there are 300 adult passengers, how many children are there on the plane?
- 4 In a necklace the ratio of black to red to green beads is 1:2:4. If there are 32 red beads, how many beads are:
  - a) black
- b) green?
- In an English exam the ratio of marks given for spelling to writing to reading is 2:8:5. If there are 48 marks for writing, how many are there for:
  - a) spelling
- b) reading?
- 6 In a sports shop the ratio of large to medium to small running vests sold is 3:5:4. If 15 medium vests are sold, how many large vests and how many small vests are sold?
- 7 Three afternoon lessons last for 2 hours altogether. The lengths of the lessons are in the ratio 2:3:3. How long is each lesson?
- 8 Split:
  - a) 1.32 m in the ratio 6:5
  - b) £65 in the ratio 4:9
  - c) 6 hours in the ratio 7:2
  - d) 2 kg in the ratio 1:3:4
  - e) £5.40 in the ratio 3:2:5
  - f) 750 ml in the ratio 5:1:9.

## **English**

As I got older, and moved through middle school and upper school, I had to begin to think about what I wanted to do when I was older. This varied between many different things: a vet that specialised in looking at horses; a beautician with the aim of getting my own salon; and a primary school teacher to inspire young people as I had been inspired at my own school. Because I wasn't sure at first, I instead decided to go to university to study something I enjoyed: English Literature. After three long, studious years in Bristol, I managed to achieve my degree in English Literature - something I was very proud of. After this, I eventually decided, after many conversations with my parents, that education was the way for me. I did a degree in teaching and gained my Postgraduate Certificate of Education, training in years I and 6. Luckily, when I was training, I managed to secure a job and have worked at Halifax Primary School ever since.

Year 6 grammatical features

As I got older, - fronted adverbial

Different things: - colon to introduce a list

Salon; and a primary - semi colon to separate items in a list

Three long, studious years - enp

- Something I was very proud of - dash for extra information

Luckily, - adverb

## **Guided Reading**

LADDIN was the son of a poor tailor in an Eastern city. He was a spoiled boy, and loved play better than work; so that when Mustapha, his father, died, he was not able to earn his living; and his poor mother had to spin cotton all day long to buy food for their support. But she dearly loved her son, knowing that he had a good heart, and she believed that as he grew older he would do better, and become at last a worthy and prosperous man.

One day, when Aladdin was walking outside the town, an old man came up to him, and looking very hard in his face, said he was his father's brother, and had long been away in a distant country, but that now he wished to help his nephew to get on. He then put a ring on the boy's finger, telling him that no harm could happen to him so long as he wore it. Now, this strange man was no uncle of Aladdin, nor was he related at all to him; but he was a wicked magician, who wanted to make use of the lad's services, as we shall see in a moment.

- I. What did Aladdin's dad do for a job?
- 2. Define tailor.
- 3. Name the two things we are told about Aladdin at the start.
- 4. What is Aladdin's father's name?
- 5. Define prosperous.
- 6. Who did the old man say he was in relation to Aladdin?
- 7. Define nephew.
- 8. What did the old man give the boy?
- 9. What happened as long as Aladdin wore the ring?
- 10. What does the extract tell us that the old man actually is?