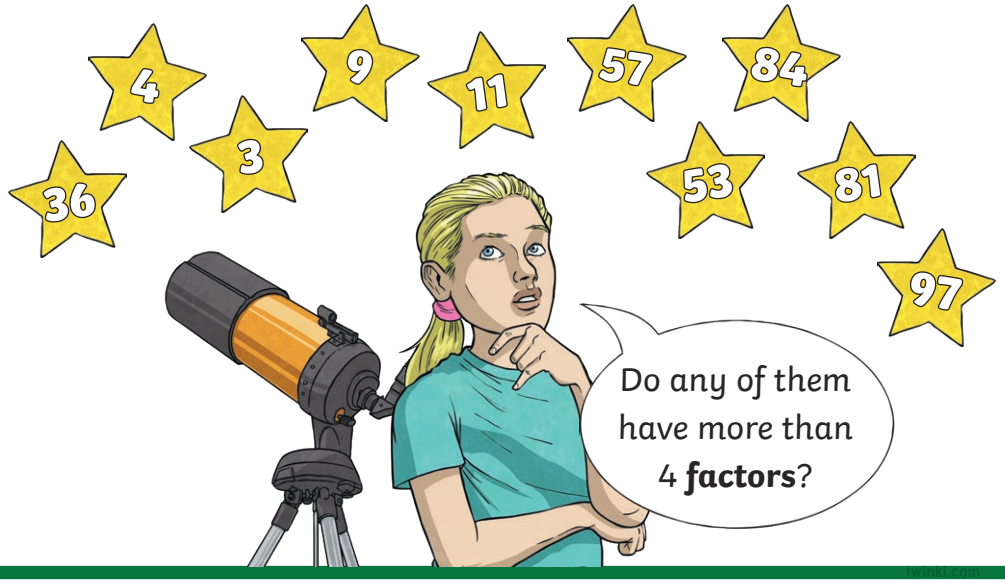
Y5 Multiplication and Division Challenge Cards

twinkl

1

a) Which of these numbers are **prime numbers**?



2

Is this true or false?
Explain why you think this.

3

a) Roll a dice and multiply the number rolled by 12.

b) Now look at the key below and roll the dice again to see what to do to your number.

- Divide it by 10.
- Multiply it by 100.
- Divide it by 1000.
- Multiply it by 10.
- Multiply it by 1000.
- Divide it by 100.

c) Repeat this ten times.

d) Put your answers in order from smallest to largest. What was the largest number you made?

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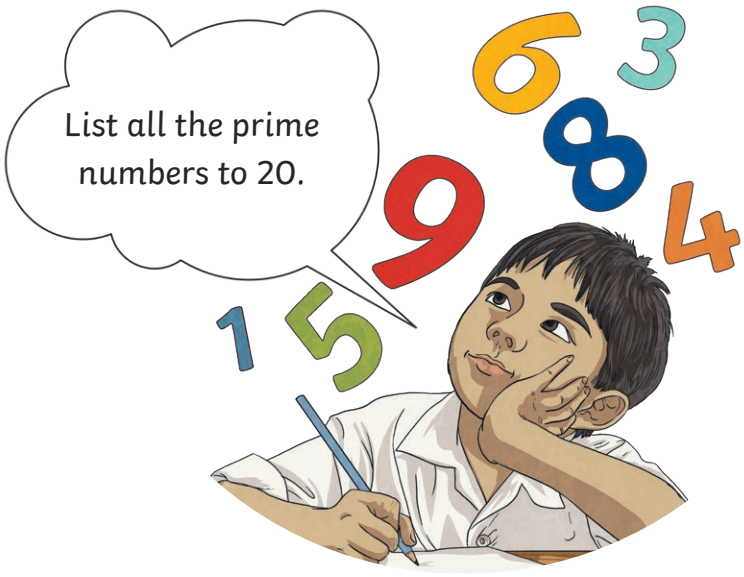
4



Y5 Multiplication and Division Challenge Cards

5

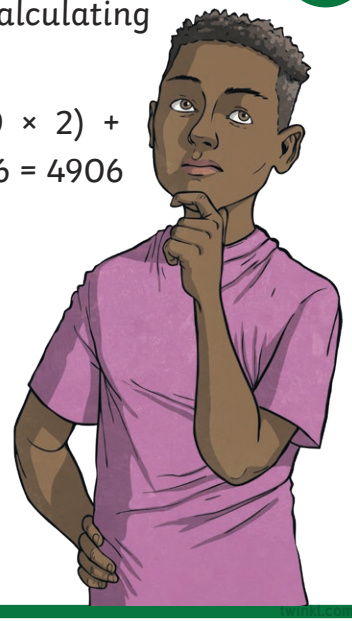
Double these numbers by partitioning, calculating and recombining them.

e.g. double 2453 = (2000 × 2) + (400 × 2) + (50 × 2) + (3 × 2) = 4000 + 800 + 100 + 6 = 4906

a) 3476

b) 5210

c) 6239



Y5 Multiplication and Division Challenge Cards

6

Halve these numbers by partitioning, calculating and recombining them.

e.g. halve 4267 = (4000 ÷ 2) + (200 ÷ 2) + (60 ÷ 2) + (7÷ 2) = 2000 + 100 + 30 + 3.5 = 2133.5

Be careful, the answers may include decimals!

a) 5344

b) 6729

c) 3271

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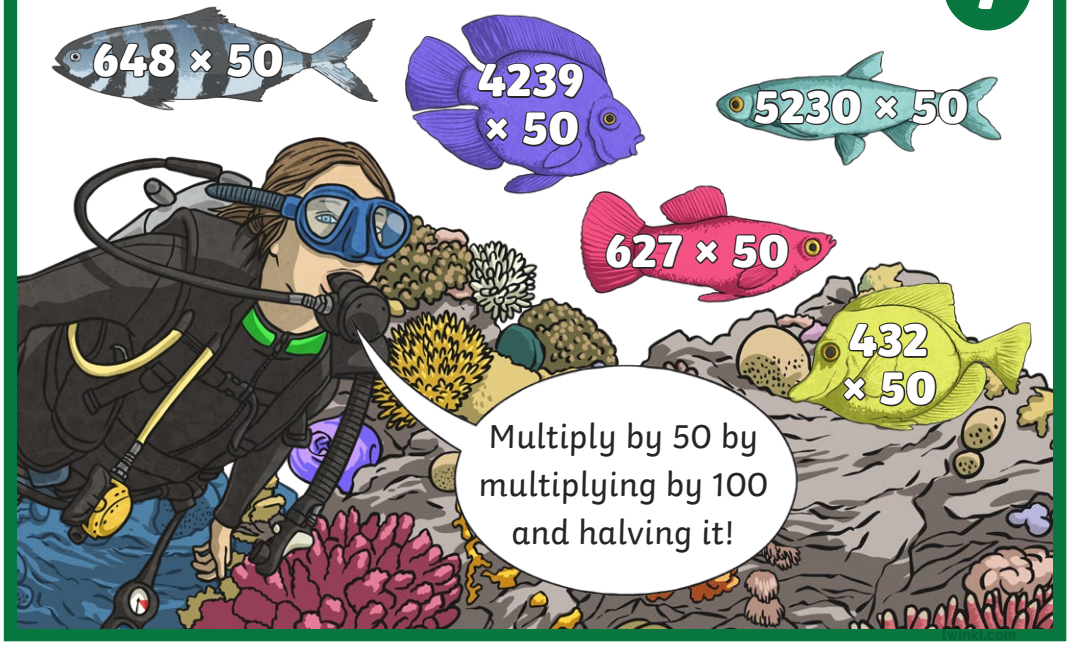
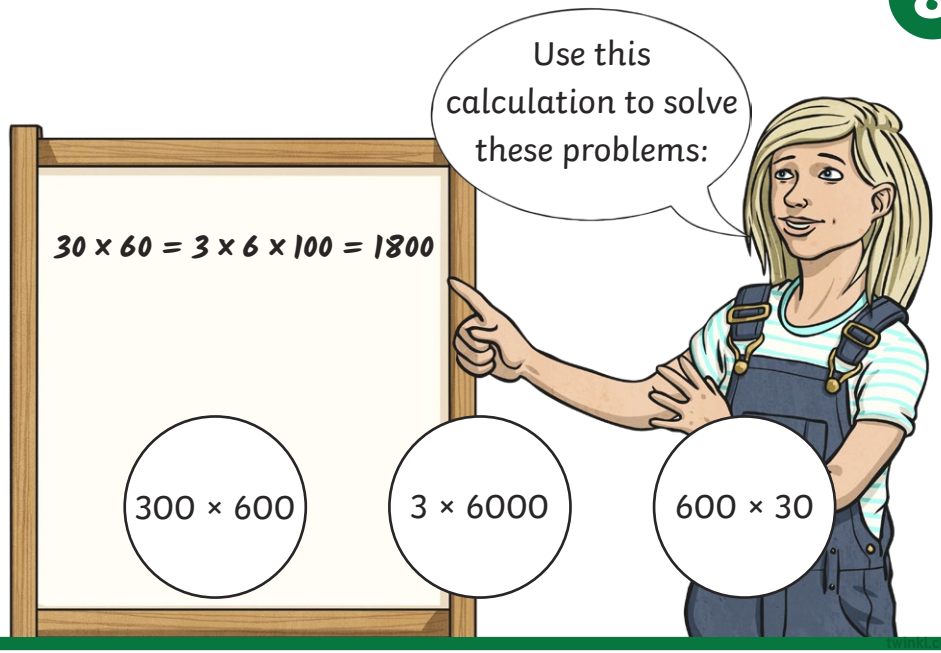
7

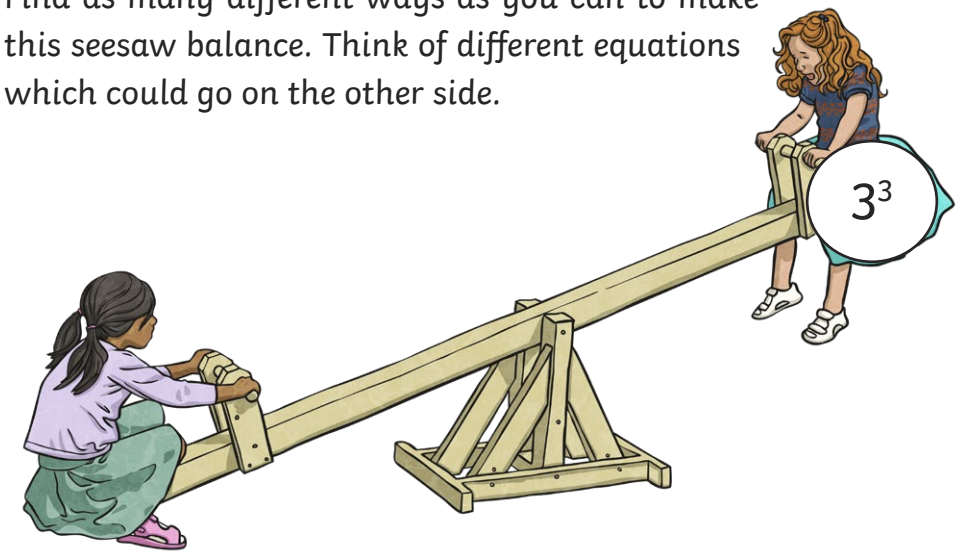


8



9

Find as many different ways as you can to make this seesaw balance. Think of different equations which could go on the other side.



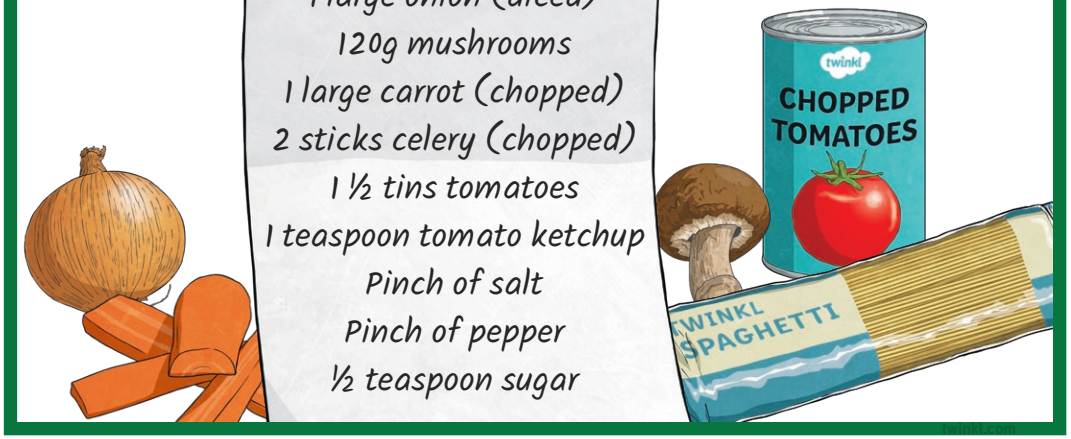
10

If an electrician charged £55 per hour, how much would it cost for her to complete a 4-hour job?

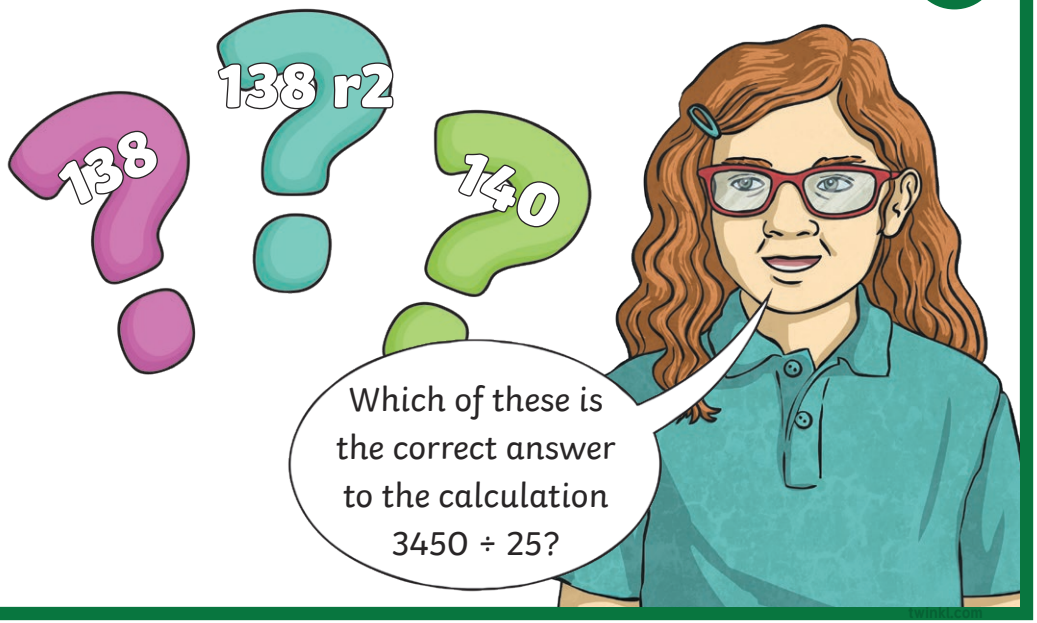
11

Scale this recipe to make enough spaghetti Bolognese for 18 people.

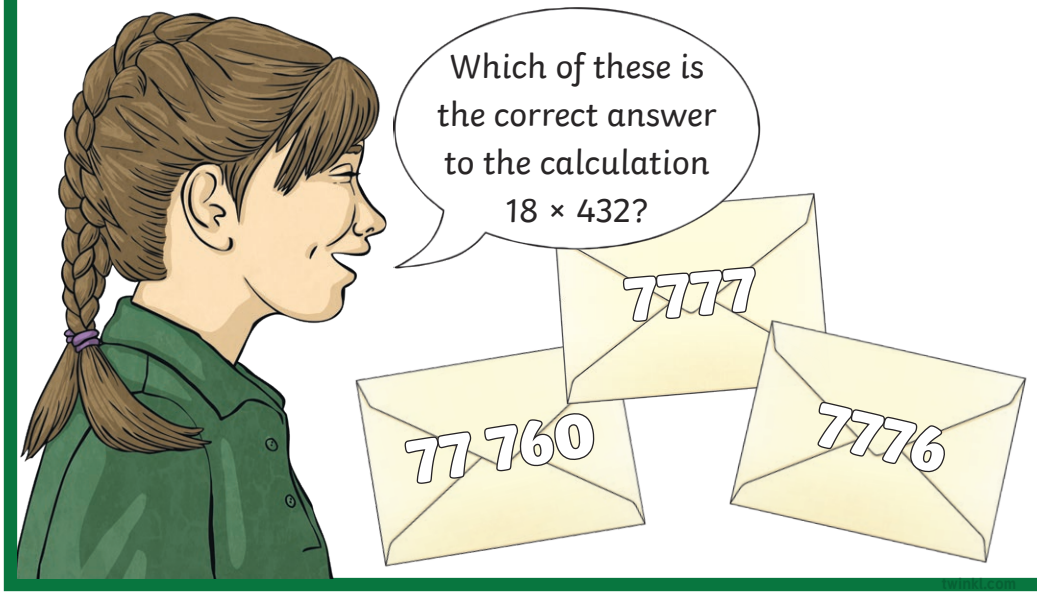
Serves 6
500g minced beef
1 large onion (diced)
120g mushrooms
1 large carrot (chopped)
2 sticks celery (chopped)
1 ½ tins tomatoes
1 teaspoon tomato ketchup
Pinch of salt
Pinch of pepper
½ teaspoon sugar



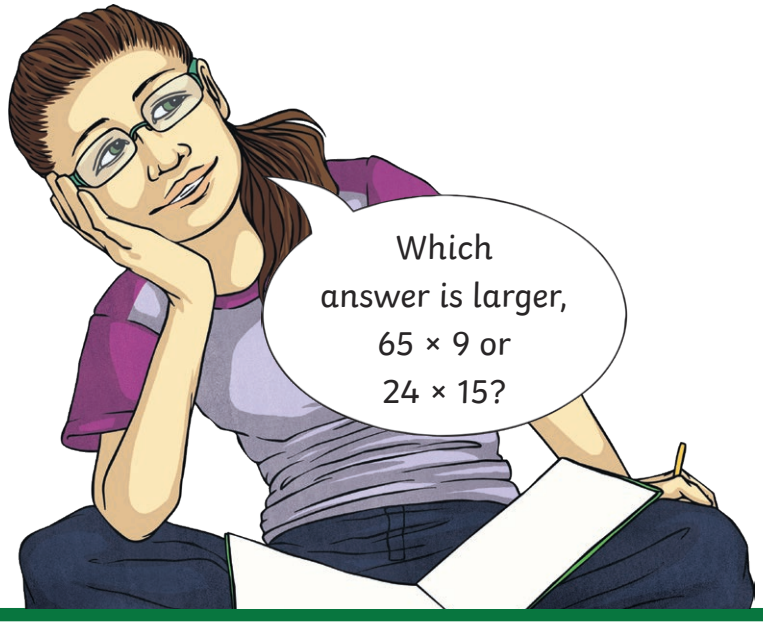
12



13

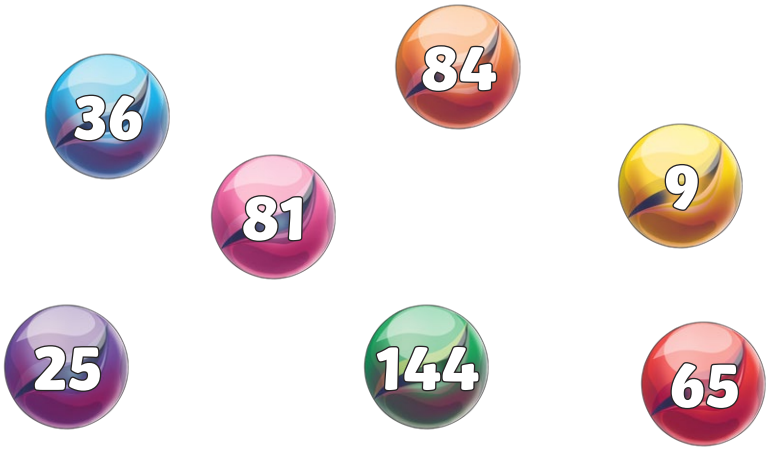


14



15

Which of these numbers are not square numbers?



16

Which personal trainer is the cheapest for three 2-hour training sessions?

My name is Kai. I charge £15 per half-hour.

My name is Holly. I charge a £70 registration fee then £24 per 2-hour session.

Y5 Multiplication and Division Challenge Cards **Answers**

Question	Answer
1.	Which of these numbers are prime numbers? Do any of them have more than 4 factors?
a	3, 11, 53, 97
b	Yes, 36, 84 and 81 have more than 4 factors.
2.	36 and 48 have no common factors. Is this true or false? Explain why you think this.
	False. 1, 2, 3, 4, 6 and 12 are common factors of 36 and 48.
3.	Roll a dice and multiply the number rolled by 12. Now look at the table below and roll the dice again to see what to do to your number. Repeat this ten times. Put your answers in order from smallest to largest. What was the largest number you made?
	Multiple answers possible.
4.	List all the prime numbers to 20.
	2, 3, 5, 7, 11, 13, 17 and 19

5.	Double these numbers by partitioning, calculating and recombining them.
a	6952
b	10 420
c	12 478
6.	Halve these numbers by partitioning, calculating and recombining them.
a	2672
b	3364.5
c	1635.5
7.	Multiply by 50 by multiplying by 100 and halving it!
	648 × 50 = 32 400 4239 × 50 = 211 950 5230 × 50 = 261 500 432 × 50 = 21 600 627 × 50 = 31 350

Y5 Multiplication and Division Challenge Cards **Answers**

8.	Use this calculation to help you to solve these problems: 30 × 60 = 3 × 6 × 100 = 1800
a	300 × 600 = 180 000
b	3 × 6000 = 18 000
c	600 × 30 = 18 000
9.	Find as many different ways as you can to make this seesaw balance. Think of different equations which could go on the other side.
	Multiple answers possible. Equations must have an answer of 27.
10.	If an electrician charged £55 per hour, how much would it cost for her to complete a 4-hour job?
	£220
11.	Scale this recipe to make enough spaghetti bolognese for 18 people.
	1500g minced beef, 3 large onions (diced), 360g mushrooms, 3 large carrots (chopped), 6 sticks celery (chopped), 4.5 tins tomatoes, 3 teaspoons tomato ketchup, 3 pinches of salt, 3 pinches of pepper, 1.5 teaspoons sugar.

12.	Which of these is the correct answer to the calculation 3450 ÷ 25?
	138
13.	Which of these is the correct answer to the calculation 18 × 432?
	7776
14.	Which answer is larger, 65 × 9 or 24 × 15?
	65 × 9 = 585
15.	Which of these numbers are not square numbers?
	84, 65
16.	Which personal trainer is the cheapest for three 2-hour training sessions?
	Holly is cheaper.