

Division HTO \div TO using the expanded written method

- Use the expanded written method of long division to calculate HTO \div TO
- Estimate and check the answer to a calculation



Challenge 1

Work out the answer to each calculation.

- 1 a 26×3 2 a 37×8 3 a 19×6 4 a 45×7 5 a 84×9
b 26×30 b 37×80 b 19×60 b 45×70 b 84×90
- 6 a 63×4 7 a 90×7 8 a 28×5 9 a 33×6 10a 9×54
b 63×40 b 90×70 b 28×50 b 33×60 b 90×54
- 11a 7×42 12a 58×6 13a 8×81 14a 5×11 15a 71×4
b 70×42 b 60×58 b 81×80 b 50×11 b 40×71

Challenge 2

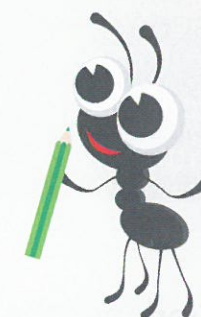
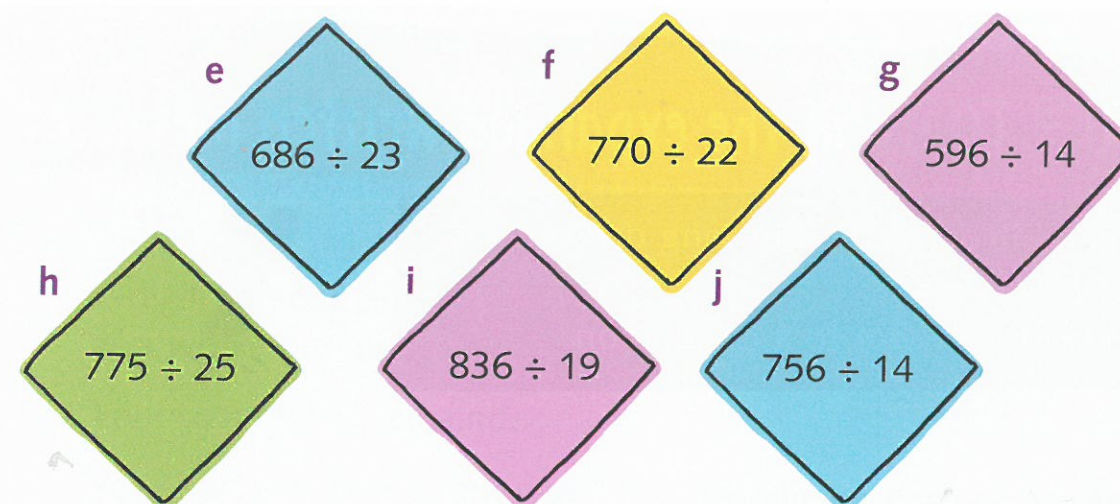
- 1 For each division calculation write your estimate, then use the expanded written method to work out the answer. Record any remainders as a fraction. Be sure to compare your answer with your estimate.

Example

$$644 \div 14 \rightarrow 600 \div 10 = 60 \text{ or } 600 \div 15 = 40$$

	H	T	O	
	4	6		
14	4	6	4	
-	5	6	0	(40 \times 14)
		8	4	
-		8	4	(6 \times 14)
			0	

- a $432 \div 16$ b $365 \div 15$ c $783 \div 36$ d $870 \div 29$



- 2 Play this game with a partner.

- Choose one number from each box.
- Divide the 3-digit number by the 2-digit number, and write the answer as a whole number.
- Your score is the remainder.
- Your partner checks your working, then takes a turn to choose a different pair of numbers.
- After 4 rounds, add together all your remainders. The winner is the player with the largest total.

924	561	349	294
373	835	573	602
256	787	136	728
162	448	615	819

26	54	45	97
62	89	73	38
17	43	84	99
64	51	32	76

Challenge 3

- 1 Find the answer to each of these problems.

- a If a plane travels at 506 miles per hour, how far would it travel in 1 minute?
- b A plane travels at 840 km per hour. If it is 196 km east of its destination, how long will it take to reach the destination?
- c A car uses 882 litres of petrol in a fortnight. How many litres does it use on average per day?
- d The total bill for 24 nights hotel accommodation is £936. How much does it cost per night?

- 2 Write down five situations when you would need to divide to find the answer.

