Unit II – Multiplication and division

I Count in 2s

→ pages 6–8

1. 2, 4, 6, **8, 10**

2. a) 2, 4, 6, **8, 10**
   b) 10, 12, **14, 16, 18, 20**

3. a) 2
   b) 4
   c) 6
   d) 8
   e) 10
   f) 12
   g) 14
   h) 16

4. Children complete the dot-to-dot picture as they count in 2s to 30.

Reflect

Children shade all the even numbers, in columns headed 2, 4, 6, 8 and 10.

2 Count in I0s

→ pages 9–11

1. Children count 10, 20.

2. Children count 10, 20, 30, 40, 50.

3. Children shade all the numbers in the column headed 10.

4. 10, 20, **30, 40, 50**

5. 50, **40, 30, 20, 10,** 0

6. Children shade 10, 20, 30, 40, 50 in one colour.
   Children shade 2, 4, 6 … to 50 in another colour.
   The numbers shaded twice are 10, 20, 30, 40, 50.

Reflect

Children practise counting in 10s, forwards and backwards, between 0 and 50.

3 Count in 5s

→ pages 12–14

1. a) There are four 5s. This totals to 20.
   b) There are six 5s. This totals to 30.
   c) There are three 5s. This totals to 15.

2. There are eight 5s. $5 \times 8 = 40$.

3. Children shade the columns headed 5 and 10.

4. 0, 5, 10, 15, **20, 25, 30, 35**

5. 50, 45, **40, 35, 30, 25, 20**

6. Children shade 5, 10, 15, 20 … to 50 in one colour.
   Children shade 2, 4, 6 … to 50 in another colour.
   The numbers shaded twice are 10, 20, 30, 40, 50.

Reflect

In pairs, children practise counting in 5s, forwards and backwards, between 0 and 50, taking it in turns to start.

4 Equal groups

→ pages 15–17

1. a) Children draw 2 flowers in each of the remaining 2 pots.
   b) Children draw 5 spots in each of the remaining 2 answer boxes.
   c) Children draw 4 triangles in each of the remaining 3 answer boxes.
   d) Children draw 3 apples in each of the remaining 3 answer boxes.

2. Children draw 4 squares in each answer box.

3. a) There are **3** groups of 2 gloves.
   b) There are **4** groups of 2 hats.
   c) There are **2** groups of 2 scarves.

4. a) There are **3** groups of **5** apples.
   b) There are **5** groups of **3** pears.

Reflect

Children should talk about:
5 groups of 4 candles on the cakes.
5 groups of 6 lollies.

5 Add equal groups

→ pages 18–20

1. a) 0, 2, 4, **6, 8, 10**
   $2 + 2 + 2 + 2 + 2 = $ **10**
   b) $5 + 5 + 5 + 5 = $ **20**

2. a) $2 + 2 + 2 + 2 = $ **8**
   b) $5 + 5 + 5 + 5 + 5 = $ **25**

3. $10 + 10 + 10 + 10 = $ **40**

4. $5 + 5 + 5 + 5 + 5 + 5 = 30$
   $10 + 10 + 10 = 30$

Reflect

$5 + 5 + 5 + 5 + 5 + 5 = 30$
$10 + 10 + 10 = 30$

6 Make arrays

→ **pages 21–23**

1. a) 5 + 5 + 5 = **15**
   b) 5 + 5 + 5 + 5 = **20**

2. a) 2 + 2 + 2 + 2 = **8**
   b) 5 + 5 + 5 + 5 + 5 = **25**

3.

4 columns — 2 △ in each column

4 columns — 3 △ in each column
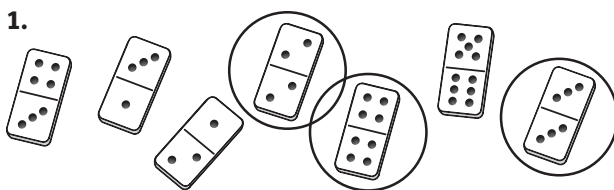
3 columns — 4 △ in each column

4. a) **5 + 5 + 5 = 15**
   There are **15** stars.
   b) **2 + 2 + 2 = 6**
   There are **6** stars.

5. Children draw equal rows of 10 in each row.

Reflect

Children write 2 + 2 + 2 + 2 + 2 = 10 or 5 + 5 = 10.

7 Make doubles

→ **pages 24–26**

1.

2. Children draw circles in the right-hand side to match
   the number of counters in the left-hand side.
   Double 1 is **2**.
   Double 2 is **4**.
   Double 3 is **6**.
   Double 4 is **8**.
   Double 5 is **10**.

3. a) Double 4 is **8**.   c) Double **1** is 2.
   b) Double **5** is 10.   d) Double **3** is **6**.

4. Double 6 is **12**.

5. a) Double 7 is **14**.
   b) Double 8 is **16**.
   c) Double 9 is **18**.
   d) Double 10 is **20**.

Reflect

Answers will depend on the confidence of each child in
recalling doubles.

8 Grouping

→ **pages 27–29**

1. a) There are **5** groups of 2.
   b) There are **6** groups of 2.
   c) There are **10** groups of 2.

2. There are **5** groups of 3.

3. There are **6** groups of 4.

4. There are **3** groups of 5.

Reflect

Children should explain that there are 4 groups of 5.

9 Sharing

→ **pages 30–32**

1. 8 shared between 2 is **4**.

2. 10 shared between 2 is **5**.

3. 12 shared between 3 is **4**.

4. 12 shared between 4 is **3**.

5. a) 20 shared between 4 is **5**.
   b) 20 shared between 10 is **2**.

Reflect

There are **6** cars.
They are shared between **3** children.
Each child gets **2** cars.

End of unit check

→ **pages 33–34**

My journal

All 3 children are correct.

Power play

Various ways are possible, split into:
2 groups of 4   2 groups of 5
2 groups of 4   2 groups of 5

Unit 12 – Fractions
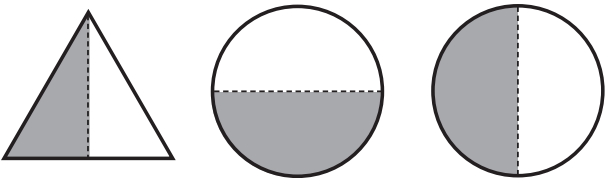
1 Recognise and find a half of a shape

1. Children should shade one part of each shape, either side of the dotted line.

2. Various shadings are possible, but children should show roughly one half.
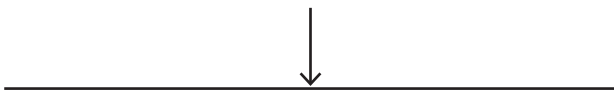Children should draw a line vertically, horizontally or diagonally then shade one side of the line, as in Question 1.
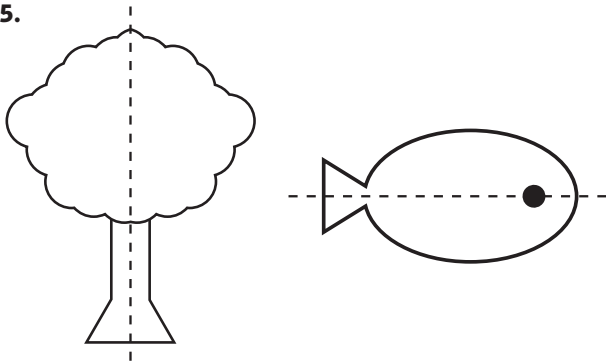
Examples:
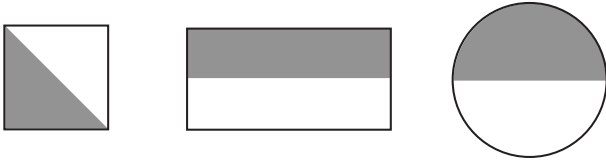
3. Children should tick the following shapes:

4. Children should draw an arrow approximately half-way along the line.

5.

Reflect

Children should draw a simple shape with a line or shading indicating one half.

2 Recognise and find a half of a quantity

1. a) **3** stars shaded, preferably on one side of the dotted line.
   b) **2** cats shaded, preferably on one side of the dotted line.
   c) **4** ice creams shaded, preferably on one side of the dotted line.
   d) **1** elephant shaded, preferably on one side of the dotted line.

2. Children shade:
   a) **3** apples
   b) **4** bananas
   c) **2** pears
   d) **6** leaves

3. a) Half of 2 is **1**.
   b) Half of 4 is **2**.
   c) Half of 6 is **3**.
   d) Half of 8 is **4**.

Reflect
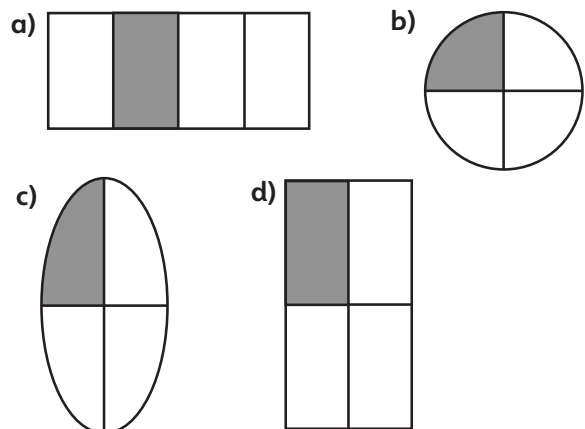
Children should reflect that double 5 is 10, so half of 10 is 5.
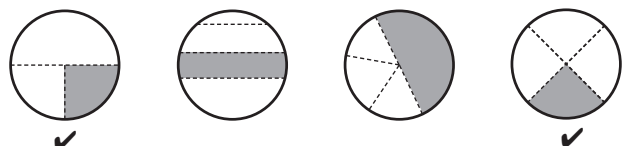
3 Recognise and find a quarter of a shape

1. Children should shade one section of each shape.

2. Children should draw lines to split the shape into 4 equal parts, shading one section.
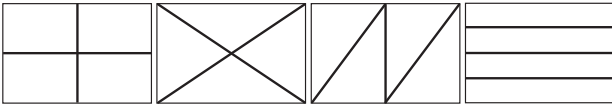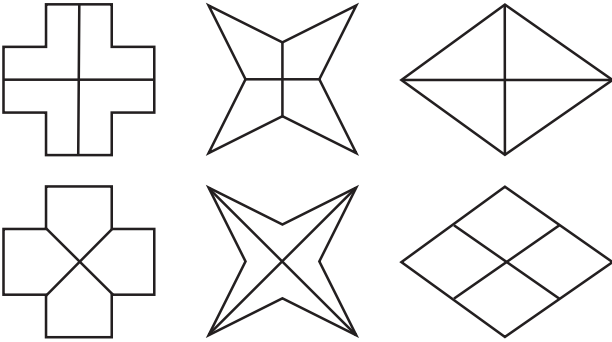
Examples:

3.

4. Children should draw lines to split the wall into 4 equal parts, shading each quarter a different colour.

Examples of the ways the wall could be split:

5. There may be other ways to those shown.

Reflect

Various answers are possible depending on the shape drawn.
Check that the parts are roughly equal.

4 Recognise and find a quarter of a quantity

→ **pages 44–46**

1.

a)

b)
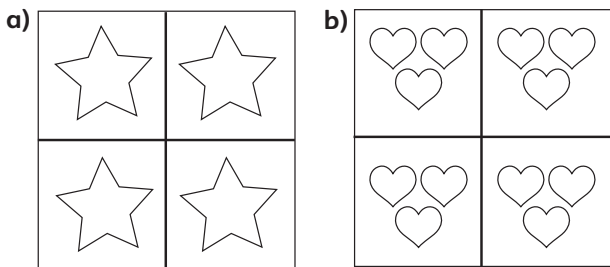
2. 2 birds drawn in each quarter.

3. 4 trees drawn in each of the remaining 3 sections to show the whole = **16**.

4. Children should tick all of the shapes, except the first circle.

5. 2 stars = 1 quarter of 8 stars. Children should colour each pair of stars a different colour.

Reflect

Children should draw 12 shapes, split into 2 groups of 6. Children should draw the same 12 shapes, split into 4 groups of 3.

End of unit check

→ **pages 47–48**

My journal

Various responses are possible, but should indicate that the whole is 10 so can be halved (5).
10 cannot be split into 4 equal parts, so Eva cannot have a quarter of 10.

Power puzzle

Any **8** squares shaded in the squares.
Any **6** squares shaded in the rectangles.
Any **8** squares shaded in the pyramid shapes.

Unit I3 – Position and direction

I Describe turns

→ **pages 49–51**

1. a) The elephant should be circled.
   b) The dolphin should be circled.
   c) The elephant should be circled.

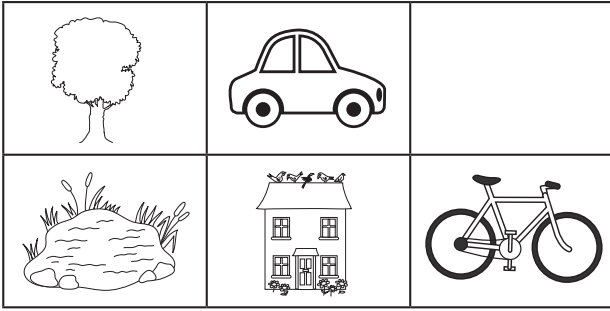**2.** a) The ball should be circled. Children may also circle the books if they have made the quarter turn right from their own point of view. Discuss the differences between answers with your class.
   b) The books should be circled. Children may also circle the ball if they have made the quarter turn left from their own point of view.
   c) The car should be circled. Children may also circle the teddy if they have made each quarter turn from their own point of view.

3. Half turn left does not describe the turn of the tractor as it would be facing vertically down. A quarter turn right or three-quarter turn left will give the correct final position.

Reflect

Children should end up facing their partner again.

2 Describe position – left and right

→ **pages 52–54**

Discover

1. Check the left arrow is shaded and children have traced the word accurately.

2. Check the right arrow is shaded and children have traced the word accurately.

3. The ball should be circled.

4. The teddy should be circled.

5. a) Fred is standing to the left of Joe.
   b) Lucy is standing to the right of Joe.

6. a) Children should draw a dog to the left and a cat to the right.
   b) Children should draw a fish on the right of the cat they drew for part a).

Reflect

Observe as children work in pairs, lifting a hand and saying whether it is their left or right. Check if they are correct each time.

3 Describe position – forwards and backwards

→ **pages 55–57**

1.

Children should draw a route through the maze similar to this. Their description could be:

Walk forward. Make a quarter turn left. Walk forward. Make a quarter turn right. Walk forward. Make a quarter turn right. Walk forward. Make a quarter turn right. Walk forward. Make a quarter turn left. Walk forward. Make a quarter turn left. Walk forward. Make a quarter turn left. Walk forward. Make a quarter turn left. Walk forward. Turn left and the finish is in front of you.

2. Children's responses will vary depending on the route they choose. For example: start from the roundabout and go forward 4 squares; turn a quarter turn right and go forward 1 square to the slide.

3. Children's answers will vary. Check they are using the correct language of left and right turns and forwards and backwards.

Reflect

Children's answers will vary. Check they are using the correct language of left and right turns and forwards and backwards.

4 Describe position – above and below

→ **pages 58–60**

1. a) The cat is **above** the elephant.
   b) The sheep is to the **right** of the dog.
   c) The tiger is **below** the mouse and to the **right** of the cow.

2.

3. Children's answer order will vary, but are likely to include:
1. The socks are below the T-shirt.
2. The socks are to the right of the shoes.
3. The socks are to the left of the trousers.

4. 1. c
2. a
3. k
4. e
The mystery word is cake.

Reflect

Children's answers will vary. For example: My shape is on the middle row. It is to the right of the cuboid. *(cone)*

5 Ordinal numbers

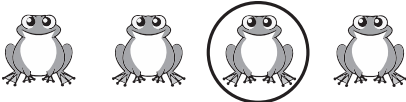→ pages 61–63

1. Children should circle the following items:
a) Circle the 1st apple.

b) Circle the 2nd tree.

c) Circle the 3rd frog.

d) Circle the 5th football.

2.

| 1st | 2nd | 3rd | 4th | 5th | 6th |
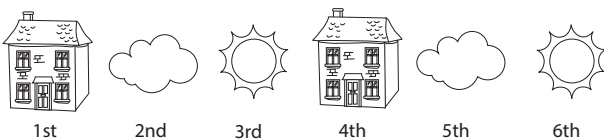
3. Children should draw in order: circle, square, triangle, circle.

4. a) Children should circle:

b) Children should circle:
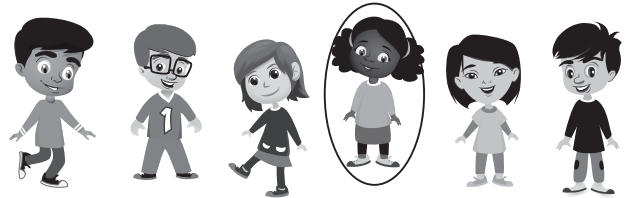
5. 7857

Reflect

Children's answers will vary. They should write something that starts with the ordinal numbers given, for example:
First, I got out of bed.
Second, I got dressed.
Third, I ate my breakfast.
Fourth, I brushed my teeth.

End of unit check
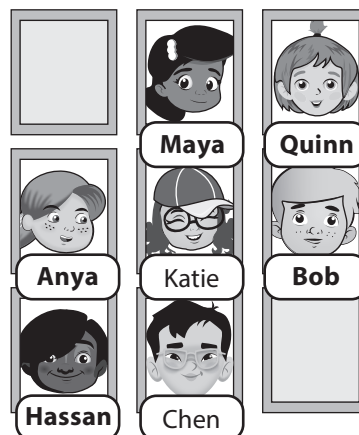
→ pages 64–65

My journal

There is more than one possible answer.
For example: Move one square to the right.
Make a quarter turn right. Move 2 squares forward.
Make a quarter turn left. Move one square forward.

Power puzzle

Unit 14 – Numbers to 100

1 Count from 50 to 100

→ **pages 66–68**

1. a) 60
 b) 68, 69, 70
 c) 76, 77, 78, 79, 80
 d) 85, 86, 87, 88, 89, 90
 e) 94, 95, 96, 97, 98, 99, 100

2. Missing numbers: 23, 31, 48, 55, 60, 74, 83, 96, 98

3. a) 88, 89, 90, 91, 92, 93
 b) 87, 86, 85, 84, 83, 82

4. Children should complete the dot-to-dot from 100 back to 60 to reveal a space rocket.

Reflect

Listen to children's personal responses as to whether they find counting on or counting back easier.

2 10s to 100

→ **pages 69–71**

1. Missing numbers: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100

2. 50, 60, 70, 80, 90

3. a) **40**
 b) **50**
 c) **50**

4. 80 eggs

5. a) **60** sweets
 b) **100** pegs
 c) Children should circle 5 boxes of 10 pens, so 50 pens.

Reflect

Children should count on from 10 to 100, showing each 10 on their fingers.

3 Partition into 10s and 1s

→ **pages 72–74**

1. a) 10, 20, 30, 40, **41**
 b) 10, 20, 30, 40, 50, 60, 70, 80, 90, 91, **92**

2. a) There are **53** counters.
 b) There are **75** counters.

3. There are **53** pencils.

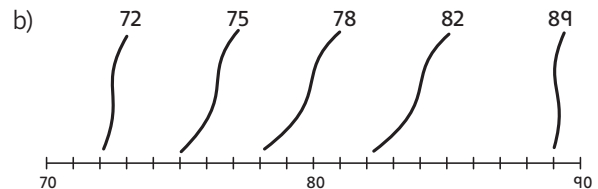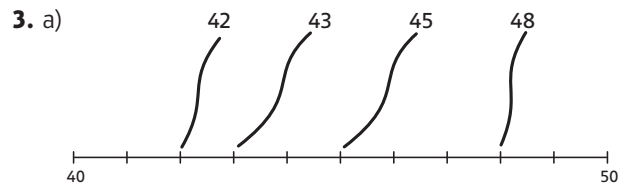**4.** 3 groups of 10 and 6 extras. There are **36** buttons.

Reflect

There are 3 full tens frames, which is 3 groups of 10. There are 2 extra counters. So there are 32 counters altogether.
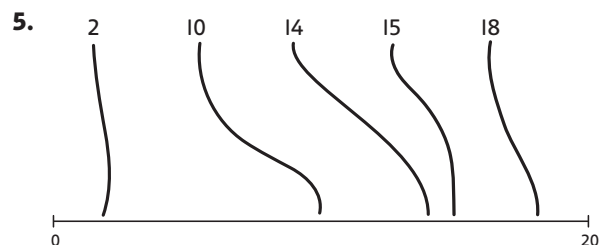
4 Number line to 100

→ **pages 75–77**

1. 51, 52, 53, 54, 55, 56, 57, 58, 59

2. a) 61, 65, 68
 b) 52, 58, 61, 65, 67

3. a)

b)

4. a) **40, 50, 60, 70, 80, 90**
 b) **57, 58, 60, 61, 63, 64**

5.

Reflect

Children should draw a number line and then place 22 in an accurate position on their line. They need to mark start and end points for their line, for example, 0 to 25 with 22 marked close to the end of the line, or 0 to 50 with 22 marked close to the middle of the line.

5 One more and one less

→ **pages 78–80**

1. a) One more than 32 is **33**.
   b) One more than 56 is **57**.
   c) One more than 71 is **72**.

2. One less than 45 is **44**.

3. a) **21**, 22, **23**
   b) **74**, 75, **76**
   c) **29**, 30, **31**
   d) **58**, 59, **60**
   e) **31**, 32, **33**
   f) **82**, 83, **84**
   g) **39**, 40, **41**
   h) **78**, 79, **80**

4. a) **83, 84**
   b) **50, 51**

5. a) 40 + 1 = **41**; 40 – 1 = **39**
   b) 37 + 1 = **38**; 37 – 1 = **36**
   c) 48 + 1 = **49**; 48 – 1 = **47**
   d) 99 + 1 = **100**; 99 – 1 = **98**

Reflect

Children should correctly say a number one more or one less than the number their partner gives.

6 Compare numbers

→ **pages 81–83**

1. Children should shade 55, 56, 57, 58, 59, 60.

2. a) 32 is less than 39.
   b) 42 is greater than 41.
   c) 65 is less than 66.
   d) 100 is greater than 99.

3. a) 38 > 31
   b) 22 < 25
   c) 31 > 26
   d) 85 > 25
   e) 26 < 38
   f) 85 < 86

4. 67 < 6**8** or 67 < 6**9**

There are various correct answers: 6**0**, 6**1**, 6**2**, 6**3**, 6**4**, 6**5** or 6**6** < 67.

There are various correct answers, for example: 57 < 5**8** (or 6**8**, 7**8**, 8**8**…).

Reflect

There are various correct answers, for example:

67 > **26;** 67 < **82;** 11 < **67;** 68 > **67**.

End of unit check

→ **pages 84–85**

My journal

Children should correctly make 75 with equipment. Describe it: 75 is made up of seven 10s and five 1s. Break it apart: 75 has the parts 70 and 5. Children should accurately draw or model 75.

Power play

Children should accurately find and shade 2-digit numbers and then compare to see who has the greater or lesser number.

Unit 15 – Money

1 Recognise coins

→ pages 86–88

1. a) Children should circle

b) Children should circle

2.

20 pence
1 pence
5 pence
50 pence
2 pence
10 pence

3. a) There are **2** 10 pence coins.

b) There are **3** 20 pence coins.

c) There are **2** 2 pound coins.

4.

Less than 10 pence		More than 10 pence
	→	
←		
	→	
←		
←		

5. Row 2: Children should circle the 20 pence coin. Less than **50 pence**.

Row 3: Children should circle the 2 pence coin. **2** pence. More than **1 pence**.

Row 4: Children should circle the **10** pence coin. 10 pence. Less than 20 pence.

Reflect

Children's answers will vary, for example: is it less/more than 10p/20p/50p?

2 Recognise notes

→ pages 89–91

1.

20 pound note
50 pound note
5 pound note
10 pound note

2. Children should circle:

3. a) There are **3** 5 pound notes.

b) There are **4** 10 pound notes.

c) There are **2** 20 pound notes.

d) There are **2** 50 pound notes.

4.

a) > 10 pounds

b) 50 pounds =

c) <

5. Charlie is not correct. The £20 and £10 are in the wrong place.

It should be £50, £20, £10, £5.

Reflect

Children should circle both £5 notes, the £10 note and the £20 note.
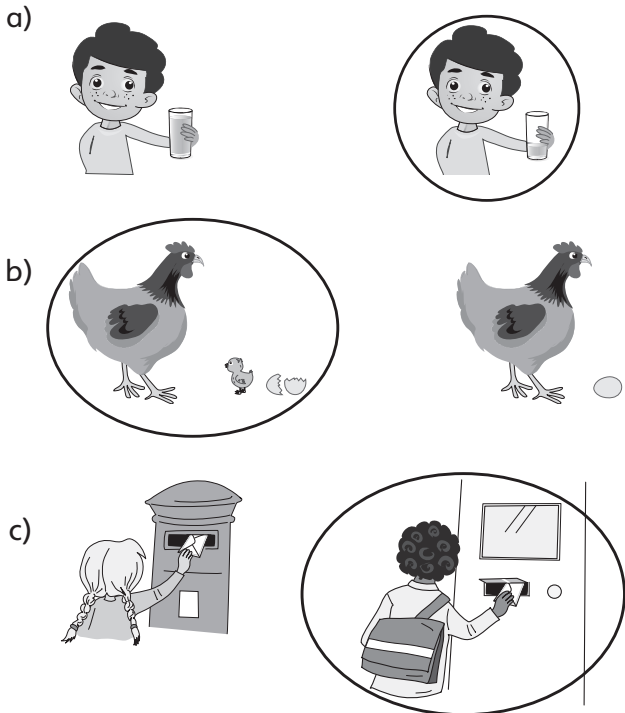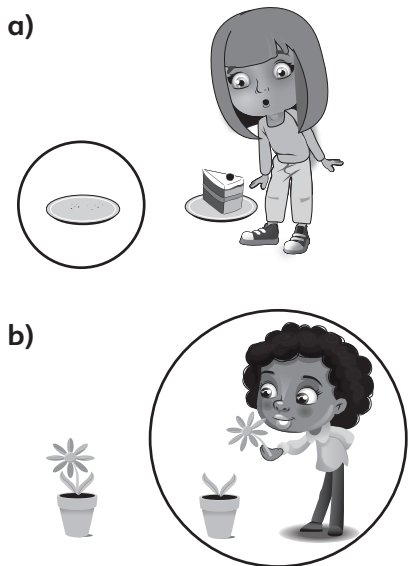
The £15 and £30 are not real notes.

3 Count in coins

→ **pages 92–94**

1. a) **25** pence

b) **3** pence

c) **40** pence

d) **6** pence

2. a) Children should draw five more 1 pence coins, 6 in total.

b) Children should draw four more 2 pence coins, 5 in total.

3. a) Children should circle **six** 5 pence coins.

b) Children should circle **three** 10 pence coins.

c) Children should circle **five** 2 pence coins.

4. a) 10 pence is **less than** 15 pence.

b) 10 pence is **the same as** 10 pence

c) 5 pence is **more than** 4 pence.

5. Lucy has six 10 pence coins.
Amy has three 20 pence coins.

Reflect

Children's answers will vary, for example:

10p + 10p

5p + 5p + 5p + 5p

2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p

1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p + 1p

Or:

Two 10 pence coins.

Four 5 pence coins.

Ten 2 pence coins.

Twenty 1 pence coins.

End of unit check

→ **pages 95–96**

My journal

Various answers are possible, for example:

50p =

10p + 10p + 10p + 10p + 10p

5p + 5p + 5p + 5p + 5p + 5p + 5p + 5p + 5p + 5p

2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p + 2p

10p + 10p + 10p + 10p + 5p + 5p

10p + 10p + 10p + 10p + 2p + 2p + 2p + 2p + 2p

5p + 5p + 5p + 5p + 5p + 5p + 5p + 5p + 2p + 2p + 2p + 2p + 2p

5p + 5p + 5p + 5p + 5p + 5p + 5p + 5p + 10p

Power play

As this is a game, there are no definitive answers.

Unit 16 – Time

1 Before and after

1. Children should circle the following images:

a)

b)

c)

2. Children should circle the following images:

a)

b)

3.

4. a) Children's answers will vary. They should suggest something that might happen before this image. For example, they put on their coats and shoes and put the dog on its lead.
   b) Children's answers will vary. They should suggest something that might happen after this image. For example, she knocks the sandcastle over or a wave washes it away.

Reflect

Children's answers will vary. They should suggest things that happened before school, such as: they got up, got dressed, ate breakfast, walked to school.
They should then explain what they will do after school, such as: they will walk home, have dinner, have a bath, read a book in bed.

2 Days of the week

1. a) Children should shade today's day of the week, for example, Monday.
   b) Children should shade yesterday's day of the week, for example, Sunday.
   c) Children should shade tomorrow's day of the week, for example, Tuesday.
   d) There are **7** days in a week.

2. Saturday should be circled.

3. Children should shade the grid as follows:

S	U	F	R	I	D	A	Y	W
A	P	E	U	J	K	L	E	E
T	H	U	R	S	D	A	Y	D
U	M	U	A	E	L	O	P	N
R	D	I	H	X	J	E	K	E
D	M	O	N	D	A	Y	S	S
A	J	S	U	N	D	A	Y	D
Y	B	G	G	W	U	F	T	A
C	V	T	U	E	S	D	A	Y

4. a) Tuesday
   b) Friday

5. a) Children's answers will depend on the current day of the week. For example, if today is Monday, then Noah played piano.

b) Children's answers will depend on the current day of the week. For example, if today is Monday, then yesterday Noah rode his bike.

c) The day after Friday is Saturday. On Saturday, Noah went swimming.

d) Two days before Wednesday is Monday. On Monday, Noah played piano.

Reflect

Check children can name the days of the week in order: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday. Can children write down some of the days?

3 Months of the year

→ **pages 103–105**

1. a) Children should shade the current month, for example, April.

b) Children should shade the month before, for example, March.

c) Children should shade the month of their birthday.

2. May

3. a) July

b) November

4. a) Gita's birthday is Saturday 12 August.

b) Children should cross out the following:

			March			
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

5.

January	1
February	2
May	5
March	3
April	4
July	7
August	8
June	6
November	11
September	9
October	10
December	12

Reflect

Check if children can name all the months of the year in order: January, February, March, April, May, June, July, August, September, October, November, December.
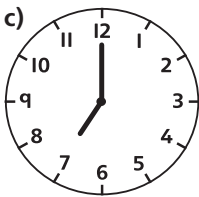
4 Tell the time to the hour

→ **pages 106–108**
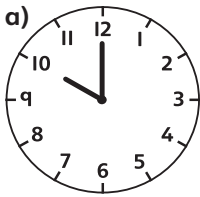
1.
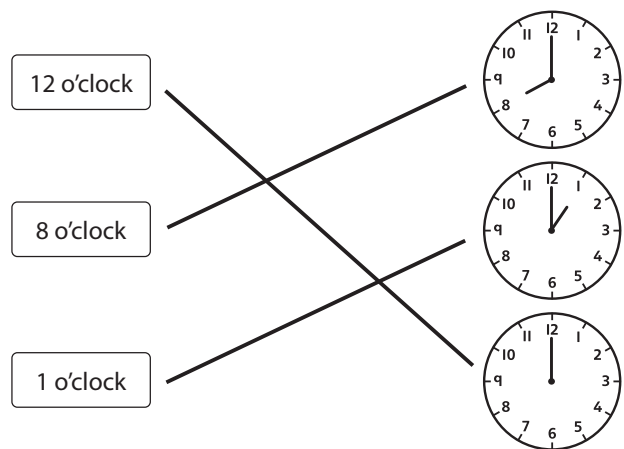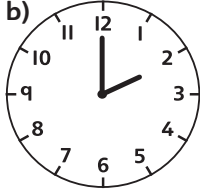
2. a) **5** o'clock

b) **6** o'clock

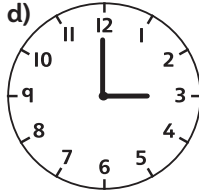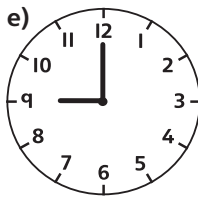c) **11** o'clock

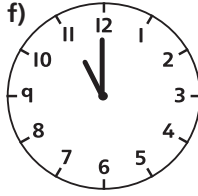**3.** Children should draw the following:

a)

10 o'clock

c)

7 o'clock

e)

9 o'clock

b)

2 o'clock

d)

3 o'clock

f)

11 o'clock

4. Kat is correct.

5. It is 12 o'clock. Children should say what they do at this time, for example: I eat my lunch.

Reflect

Children should draw 4 o'clock on the clock. Check they draw a shorter hour hand pointing to the 4 and a longer minute hand pointing to the 12.

5 Tell the time to the half hour

→ **pages 109–111**
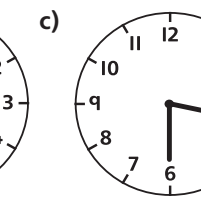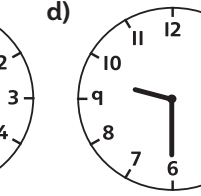
1.
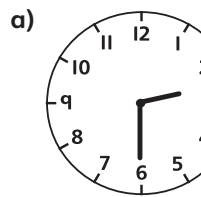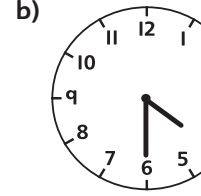
2. a) half past **11**
   b) half past **9**
   c) half past **10**
   d) half past **1**

3. Children should draw the following:

a)

half past 2

c)

half past 3

b)

half past 4

d)

half past 9

4. No, Maya is incorrect as the minute hand is pointing to 12 and the hour hand is pointing to 6, so it is 6 o'clock.

5. The minute hand is pointing to 6, which is half past. The time could be half past 1, half past 2, half past 3 or half past 4.

Reflect

Children should draw a longer minute hand pointing to the 6 and a shorter hour hand pointing to half-way between the 7 and 8.

End of unit check

→ **pages 112–113**

My journal

Same: The minute hand on both clocks is pointing to 6, which is half past the hour.
Different: The hour hands are pointing to different times (between 4 and 5 and between 8 and 9).
Different: One clock is showing half past 4 and the other is showing half past 8.

Power play

Check children can accurately draw a range of the clock times and then read the times drawn by their partner.