

Homework Guide 3

Unit 1, Week 1: Number - Number and place value

Lesson 2: Ways to partition

Answers will vary.

Lesson 4: Make the larger number

Game

Unit 1, Week 2: Number - Addition and subtraction

Lesson 1: 2-digit addition

Answers will vary.

Lesson 4: Mental addition and subtraction

- Challenge 1**
- | | |
|------|------|
| a 67 | f 41 |
| b 64 | g 25 |
| c 87 | h 53 |
| d 96 | i 49 |
| e 98 | j 32 |

- Challenge 2**
- | | |
|-------|-------|
| a 149 | f 222 |
| b 293 | g 275 |
| c 398 | h 336 |
| d 457 | i 373 |
| e 552 | j 472 |

- Challenge 3**
- | | |
|-------|-------|
| a 435 | f 367 |
| b 548 | g 776 |
| c 753 | h 584 |
| d 871 | i 742 |
| e 915 | j 843 |

Unit 1, Week 3: Geometry - Properties of shape

Lesson 1: Shapes about the home

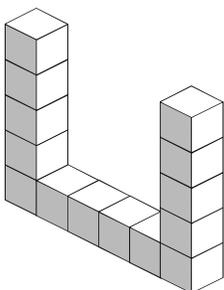
Open

Lesson 4: Patterns of 3-D shapes

Challenge 1 1, 2

Model	1st	2nd	3rd	4th	5th	6th
Number of cubes	2	4	6	8	10	12

Challenges 2, 3 1



2, 3

Model	1st	2nd	3rd	4th	5th	6th
Number of cubes	5	8	11	14	17	20

Challenge 3

3 cubes added each time to make the next model. Pattern is going up in 3s. 10th pattern needs $(10 \times 3) + 2$ cubes = 32 cubes.

Unit 2, Week 1: Number - Multiplication and division

Lesson 3: All about 3s

Challenge 1 9, 3, 3, 15, 18, 21, 8, 6, 9

- Challenge 2**
- | | |
|------|------|
| a 3 | i 4 |
| b 5 | j 2 |
| c 3 | k 5 |
| d 5 | l 6 |
| e 7 | m 11 |
| f 11 | n 8 |
| g 3 | o 12 |
| h 3 | |

Challenge 3 Open

Lesson 4: 2s, 3s, 5s and 10s

- Challenge 1** $6 \times 5 = 30$ $7 \times 5 = 35$
 $3 \times 8 = 24$ $6 \times 10 = 60$
- Challenge 2**
- | | |
|-------------------|-----------------|
| 1 $25 \div 5 = 5$ | $15 \div 5 = 3$ |
| $50 \div 5 = 10$ | |
| 2 $14 \div 2 = 7$ | $18 \div 2 = 9$ |
| $10 \div 2 = 5$ | |
| 3 $15 \div 3 = 5$ | $21 \div 3 = 7$ |
| $30 \div 3 = 10$ | |
- Challenge 3**
- | |
|----------------------------|
| a $3 \times 5 = 15$ slices |
| b $24 \div 3 = 8$ flowers |
| c $12 - 3 = 9$ cakes |
| d $7 \times 3 = 21$ stamps |

Unit 2, Week 2: Fractions

Lesson 1: Fractions at home

Open

Lesson 3: Fraction snakes

Open

Unit 2, Week 3: Measurement (mass)

Lesson 1: Grocery grams

- Challenge 1** Answers will vary.
- Challenge 2** Answers will vary.
- Challenge 3** Answers will vary.

Lesson 3: What's for supper?

Challenge 1

Ingredients	Number of batches		
	1	2	4
Chocolate	100 g	200 g	400 g
Margarine	25 g	50 g	100 g
Cornflakes	150 g	300 g	600 g
Honey	50 g	100 g	200 g

Challenge 2

Ingredients	Number of people			
	2	4	8	10
Rice noodles	100 g	200 g	400 g	500 g
Cooked chicken	50 g	100 g	200 g	250 g
Prawns	60 g	120 g	240 g	300 g
Beansprouts	150 g	300 g	600 g	750 g

Challenge 3

Ingredients	Number of people			
	4	8	10	5
Sugar snap peas	150 g	300 g	375 g	187½ g
Rice noodles	250 g	500 g	625 g	312½ g
Cashew nuts	100 g	200 g	250 g	125 g
Carrots	300 g	600 g	750 g	375 g
Beansprouts	400 g	800 g	1000 g	500 g

Unit 3, Week 1: Number - Addition and subtraction

Lesson 1: Missing number additions

- Challenge 1**
- | | |
|-------|-------|
| a 143 | e 162 |
| b 152 | f 172 |
| c 133 | g 196 |
| d 168 | h 207 |
- Challenge 2**
- | | |
|-----|-----|
| a 5 | e 6 |
| b 8 | f 7 |
| c 8 | g 7 |
| d 7 | h 5 |
- Challenge 3**
- | | |
|-----|-----|
| a 9 | e 7 |
| b 6 | f 4 |
| c 5 | g 7 |
| d 8 | h 7 |

Lesson 3: Adding 1s, 10s and 100s

- Challenge 1**
- | | |
|-------|-------|
| a 129 | f 168 |
| b 138 | g 183 |
| c 153 | h 249 |
| d 146 | i 461 |
| e 161 | j 650 |
- Challenge 2**
- | | |
|-------|-------|
| a 162 | f 480 |
| b 293 | g 904 |
| c 279 | h 531 |
| d 547 | i 302 |
| e 451 | j 607 |
- Challenge 3**
- | | |
|-------|-------|
| a 30 | f 6 |
| b 6 | g 499 |
| c 300 | h 50 |
| d 70 | i 80 |
| e 600 | j 500 |

Lesson 3: Spinning subtraction

Open

Unit 7, Week 3: Statistics

Lesson 1: Keeping a tally

Challenges 1, 2, 3

Popular words	Frequency
the	18
was	11
and	20
to	12
from	7
they	13

Challenges 2, 3

Answers will vary.

Challenge 3

Answers will vary.

Lesson 3: Tins, packets and bags

Challenges 1, 2, 3

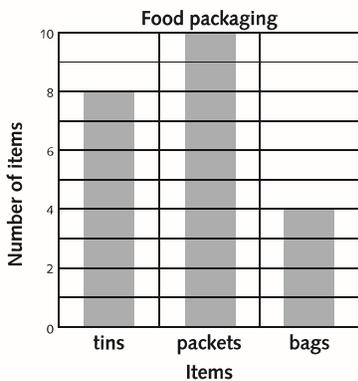
1

Item	Number
tins	8
packets	10
bags	4

- 2 a There are more packets than tins.
- b There are 4 fewer bags than tins.

Challenges 2, 3

1



2

Item	Food packaging				
tins	○	○	○	○	
packets	○	○	○	○	○
bags	○	○			

Key ○ = 2 items

Challenge 3

Open

Unit 8, Week 1: Number - Multiplication and division incl. Number and place value

Lesson 2: Revising multiplication facts

Challenge 1

- 1 20, 32, 24, 12, 36
- 2 21, 18, 9, 27, 24
- 3 48, 32, 64, 56, 72

Challenge 2

- 1 $4 \times 3 = 12$ $3 \times 4 = 12$
- 2 $6 \times 5 = 30$ $5 \times 6 = 30$
- 3 $9 \times 3 = 27$ $3 \times 9 = 27$

Challenge 3

x	2	3	4	5	8	10
7	14	21	28	35	56	70
3	6	9	12	15	24	30
9	18	27	36	45	72	90
11	22	33	44	55	88	110
60	120	180	240	300	480	600

Lesson 3: Revising division facts

Challenge 1

- 6 8 48 24
- 7 42 28 4
- 9 72 8 63

Challenge 2

- 56 ÷ 8 = 7; 56 ÷ 7 = 8
- 32 ÷ 8 = 4; 32 ÷ 4 = 8
- 21 ÷ 7 = 3; 21 ÷ 3 = 7

Challenge 3

- 1 7
- 12
- 8
- 90
- 50
- 2 6
- 8
- 9
- 30
- 70
- 3 7
- 6
- 4
- 50
- 90

Unit 8, Week 2: Number - Fractions

Lesson 1: Making pizzas

Open

Lesson 3: Fraction snakes

Game

Unit 8, Week 3: Measurement (perimeter)

Lesson 3: Perimeter search

Challenge 1

- 1 to 4 all perimeters = 7 cm

Challenge 2

- 1 to 4 all perimeters = 8 cm

Challenge 3

Answers will vary.

Lesson 4: Join up the rectangles

Challenges 1, 2

- a 22 cm
- b 24 cm
- c 24 cm
- d 18 cm
- e 28 cm
- f 22 cm
- g 18 cm

Challenge 2

- a 22 cm
- b 24 cm
- c 30 cm
- d 28 cm

Unit 9, Week 1: Number - Number and place value

Lesson 1: Raffle raffle

Challenge 1

- a 53 54 55
- b 65 66 67
- c 105 106 107
- d 124 125 126

Challenge 2

- a 178 179 180 181 182 183
- 184 185
- b 599 600 601 602 603 604
- 605 606
- c 768 769 770 771 772 773
- 774 775
- d 917 918 919 920 921 922
- 923 924

Challenge 3

Answers will vary.

Lesson 4: Secret numbers

Game

Unit 9, Week 2: Number - Addition and subtraction

Lesson 1: Mental jumps

Answers will vary.

Lesson 3: Practising the column method for subtraction

Challenge 1

- a 211
- b 113
- c 232
- d 164
- e 263
- f 212
- g 213
- h 221

Challenge 2

- a 245
- b 242
- c 449
- d 318
- e 319
- f 326
- g 332
- h 327

Challenge 3

- a 318
- b 374
- c 453
- d 386
- e 471
- f 562
- g 483
- h 438

Unit 9, Week 3: Geometry - Properties of shape

Lesson 1: Capital letters

Challenges 1, 2, 3

- 1, 2 Letters A, E, F, H, I, K, L, M, N, T, V, W, X, Y, Z on a square dot grid with horizontal lines in blue, vertical lines in red and diagonal lines in green.

Challenges 2, 3

- Set A E, F, H, L, T
- Set B V, W, X
- Set C A, Z
- Set D K, M, N, W, Y

Challenge 3

- a Capital letter I
- b Has a vertical line only

Lesson 3: Pin board puzzles

Open

Unit 10, Week 1: Number - Multiplication and division

Lesson 1: Multiplication using partitioning

Challenge 1

1	27	270
2	24	240
3	24	240

Challenge 2

1	150	3	280
2	150	4	720

Challenge 3

1	162	3	292
2	145	4	736

Lesson 3: Multiplication: Introducing the expanded written method

Challenge 1

a	7	f	4
b	7	g	6
c	4	h	8, 4
d	4	i	2, 4
e	3		

Challenge 2

a	200	c	120
b	500	d	210

Challenge 3

a	180	c	111
b	480	d	204

Unit 10, Week 2: Number - Fractions

Lesson 2: Home fractions

Answers will vary.

Lesson 3: Fraction wall equivalents

Answers will vary.

Unit 10, Week 3: Measurement (volume and capacity)

Lesson 3: Multiples of millilitres

Challenge 1

Amount in millilitres	100 ml	200 ml	400 ml	800 ml
500 ml	1		1	
600 ml		1	1	
700 ml	1	1	1	
800 ml				1

Challenge 2

Size of jug	2 times	3 times	5 times
100 ml	200 ml	300 ml	500 ml
200 ml	400 ml	600 ml	1000 ml
400 ml	800 ml	1200 ml	2000 ml
800 ml	1600 ml	2400 ml	4000 ml

Challenge 3

Amount in millilitres	100 ml	200 ml	400 ml	800 ml
900 ml	1			1
1100 ml	1	1		1
1300 ml	1		1	1
1500 ml	1	1	1	1

Lesson 4: Kitchen capacities

- Challenges 1, 2**
- a vase 1570 ml
b jar 1000 ml
c bowl 1730 ml
d pan 1800 ml
 - a 230 ml
b 800 ml
c 70 ml

Challenge 3 Answers will vary.

Unit 11, Week 1: Number - Addition and subtraction incl. Measurement (money)

Lesson 2: Meet my addition target

Answers will vary.

Lesson 3: Finding change

Answers will vary.

Unit 11, Week 2: Number - Addition and subtraction incl. Measurement (money)

Lesson 2: Meet my subtraction target

Answers will vary.

Lesson 4: Jumping forward and backwards

Answers will vary.

Unit 11, Week 3: Measurement (time)

Lesson 3: Calendar patterns

Challenges 1, 2, 3

AUGUST						
M	T	W	Th	F	S	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

- Challenges 2, 3**
- a, b Open
c 6, 12, 18, 24, 30

- Challenge 3**
- Even numbers on every second diagonal line.
 - Multiples of 3 on every third diagonal line.

Lesson 4: Today's TV Guide

Open

Unit 12, Week 1: Number - Multiplication and division

Lesson 2: Multiplication: Introducing the formal written method

- Challenge 1**
- 60
 - 80
 - 30
 - 80
 - 60
 - 100

- Challenge 2**
- 200
 - 500
 - 120
 - 640
 - 210
 - 400

Lesson 4: Solving problems

Challenge 1

1	24	9
	15	18
	21	

2	32	24
	72	48
	56	

- Challenge 2**
- 232 people.
 - 392 pencils.
 - 18 more biscuits.
 - 201 wheels.
 - 47 cakes.
 - 390 flowers.

Challenge 3 Answers will vary.

Unit 12, Week 2: Number - Multiplication and division

Lesson 1: Division using partitioning

- Challenge 1**
- 36, 24, 20, 48, 28, 12.
 - 72, 40, 96, 80, 64, 24.
 - 30, 9, 36, 18, 27, 24, 33.

- Challenge 2**
- 40
 - 10
 - 20
 - 30
 - 40

- Challenge 3**
- 42
 - 12
 - 22
 - 32