Measuring IN KILOGRAMS

The children measured the weights of objects using kilogram weights.

Card 9

1 The  weighs ..... kilograms.

(a) 1 (b) 2 (c) 3

2 The  weighs ..... kilograms.

(a) 4 (b) 5 (c) 6

3 The  weigh ..... than 2 kilograms.

(a) less (b) more

4 The  weighs ..... than 1 kilogram.

(a) less (b) more

5 Which is heavier?

 or  ?

6 Which is heavier?

 or  ?

7 How many kilograms do the  and  weigh altogether?

(a) 5 (b) 6 (c) 7

8 The  weighs 2 kg. How many kilogram weights need adding so the scales balance?

(a) 1 (b) 2 (c) 3

9 The  weigh 1 kg. How many kilogram weights need taking away so the scales balance?

(a) 1 (b) 2 (c) 3

10 The  weighs 2 kg.

The  weigh 1 kg. How many kilograms do they weigh together?

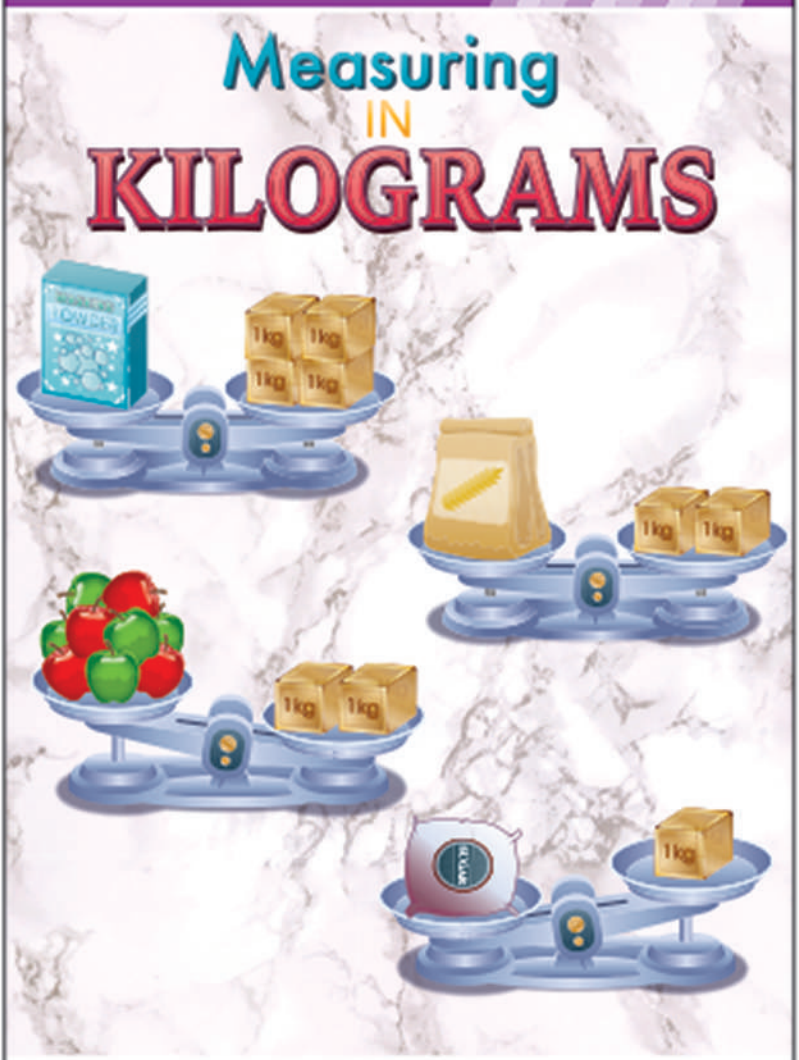
(a) 1 (b) 2 (c) 3

ADDitional Activity

- Put 10 books on one side of the balance scales.
- Put a 1 kg weight on the other side of the balance scales.
- Which is heavier, the books or the 1 kg weight?

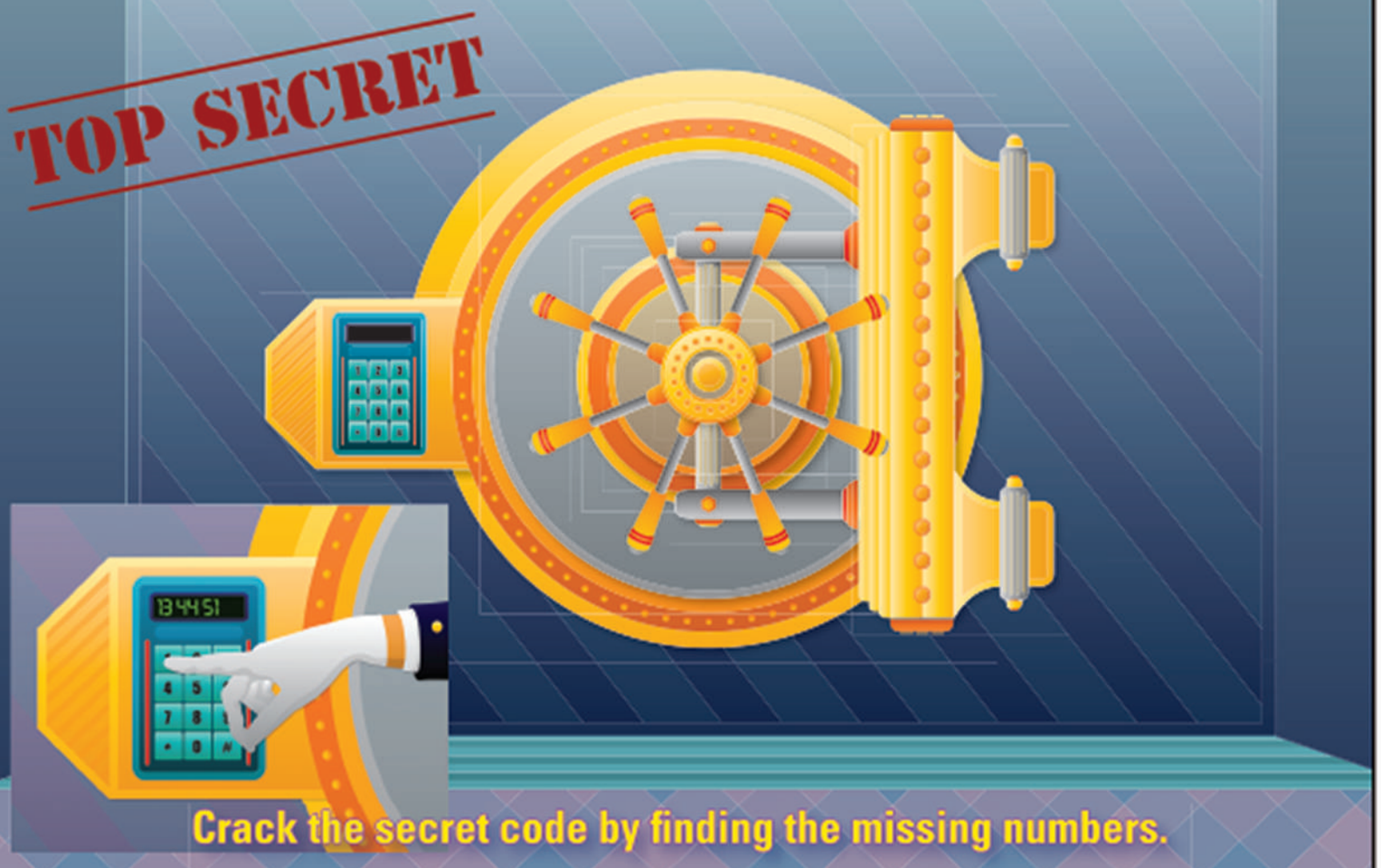
Card 9

Answers



1. (b) 2
2. (a) 4
3. (a) less
4. (b) more
5. washing powder
6. washing powder
7. (b) 6
8. (a) 1
9. (a) 1
10. (c) 3

Crack the Code Pattern



Crack the secret code by finding the missing numbers.

1. What is the last number needed for the code?

35, 38, 41, ____

2. The last code number in this sequence is .....

36, 31, 26, ____

3. What is the missing number?

61, 71, ____, 91

4. **True** or **False**?
The missing number in this code is 68.

48, 53, ____, 63

Card 5

42, 45, 48, 51

5 How is this pattern changing?

(a) increasing by 3

(b) increasing by 4

(c) decreasing by 5

___, 13, 23, 33

6 What is the rule for the code pattern above?

(a) add 5

(b) add 10

(c) take away 10

7 What is the missing number in Question 6?

77, 82, 87, 92

8 **True** or **False**?
The rule for this code pattern is 'add 5' to each number.

99, ___, 89, 84, ___

9 What is the secret to the code above?

(a) take away four

(b) add five

(c) take away five

10 The missing numbers needed for the code in question 9, are .... and ....

___, 43, 41, ___, 37

11 The missing numbers are .... and ....

12 The code rule is:

(a) add 2

(b) take away 3

(c) take away 2

ADDitional Activity

Work out the secret message using this code:

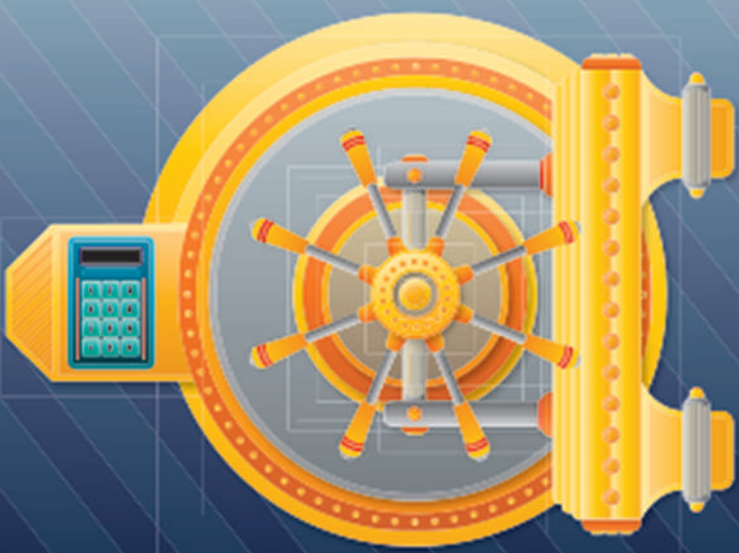
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

.... 9   .... 21 .... 19 5   .... 20 .... 8 5   .... 19 .... 1 .... 6 5   .... 20 15   .... 16 .... 18 .... 15 .... 20 .... 5 .... 3 20

.... 13 25   .... 4 .... 5 .... 12 .... 9 .... 3 .... 9 .... 15 .... 21 19   .... 12 .... 21 .... 14 .... 3 .... 8 .

Card 5

Answers



Crack the Code Pattern

1. 44
2. 21
3. 81
4. False
5. (a) increasing by 3
6. (b) add 10
7. 3
8. True
9. (c) take away five
10. 94 and 79
11. 45 and 39
12. (c) take away 2

The Tenths Train

Complete the missing tenths.

1. $\frac{0}{10}$, $\frac{1}{10}$, $\frac{\square}{10}$, $\frac{3}{10}$, $\frac{4}{10}$, $\frac{\square}{10}$, $\frac{6}{10}$, $\frac{\square}{10}$, $\frac{8}{10}$, $\frac{\square}{10}$, $\frac{10}{10}$

2. $\frac{10}{10}$, $\frac{9}{10}$, $\frac{\square}{10}$, $\frac{\square}{10}$, $\frac{6}{10}$, $\frac{5}{10}$, $\frac{\square}{10}$, $\frac{3}{10}$, $\frac{2}{10}$, $\frac{\square}{10}$, $\frac{0}{10}$

3. $\frac{0}{10}$ is the same as:

   (a) 0 (b) $\frac{1}{2}$ (c) 1

4. $\frac{10}{10}$ is the same as:

   (a) 0 (b) $\frac{1}{2}$ (c) 1

The pizza has been cut into ten slices.

5. How many tenths are there altogether?

   (a) 8 (b) 10 (c) 12

6. Jim eats $\frac{7}{10}$ of the pizza.
   How many slices are left?

   (a) 3 (b) 4 (c) 5

7. Jane eats $\frac{4}{10}$ of the pizza and Joe eats $\frac{5}{10}$ of the pizza.

   How many slices did they eat altogether?

   (a) 7 (b) 8 (c) 9

8. Jed eats half of the pizza. How many tenths is this?

   (a) $\frac{3}{10}$ (b) $\frac{5}{10}$ (c) $\frac{7}{10}$

Card 1

There are 20 jelly bean sweets.

9 There are 6 orange sweets. How many is this in tenths?

(a) $\frac{3}{10}$ (b) $\frac{6}{10}$ (c) $\frac{9}{10}$

10 There are 4 yellow sweets. How many is this in tenths?

(a) $\frac{1}{10}$ (b) $\frac{2}{10}$ (c) $\frac{4}{10}$

11 There are 2 green sweets. How many is this in tenths?

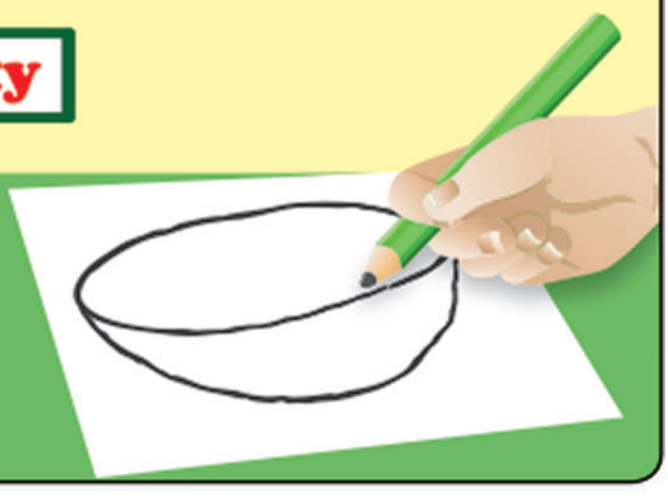
(a) $\frac{1}{10}$ (b) $\frac{2}{10}$ (c) $\frac{4}{10}$

12 Julie eats $\frac{8}{20}$ of the sweets. How many is this in tenths?

(a) $\frac{2}{10}$ (b) $\frac{4}{10}$ (c) $\frac{6}{10}$

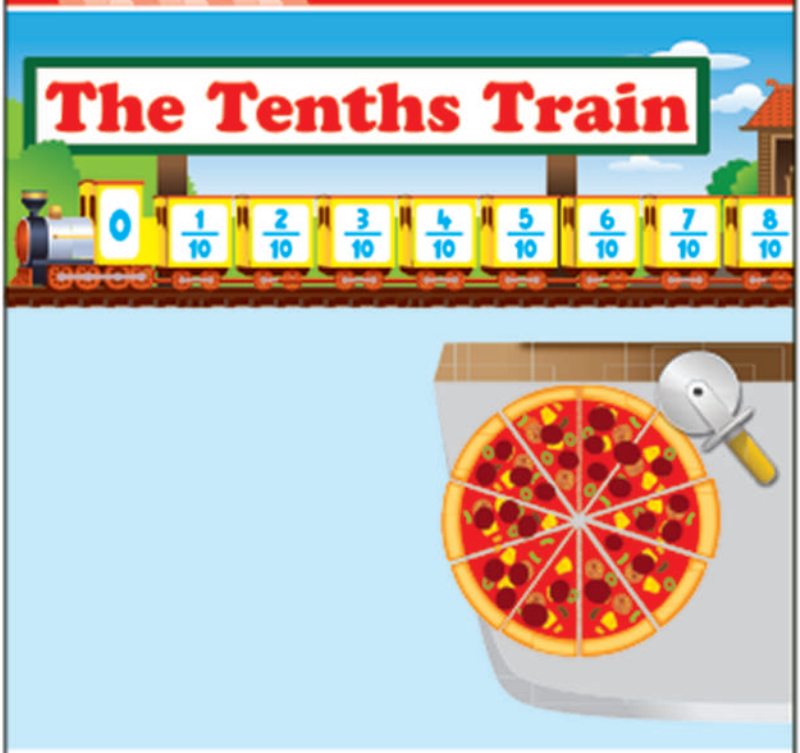
ADDitional Activity

- **Draw a bowl of fruit. The bowl must contain the following fractions of fruit:**
- **$\frac{1}{10}$ kiwi fruit, $\frac{3}{10}$ apples, $\frac{2}{10}$ pears, $\frac{2}{10}$ oranges and $\frac{2}{10}$ bananas**



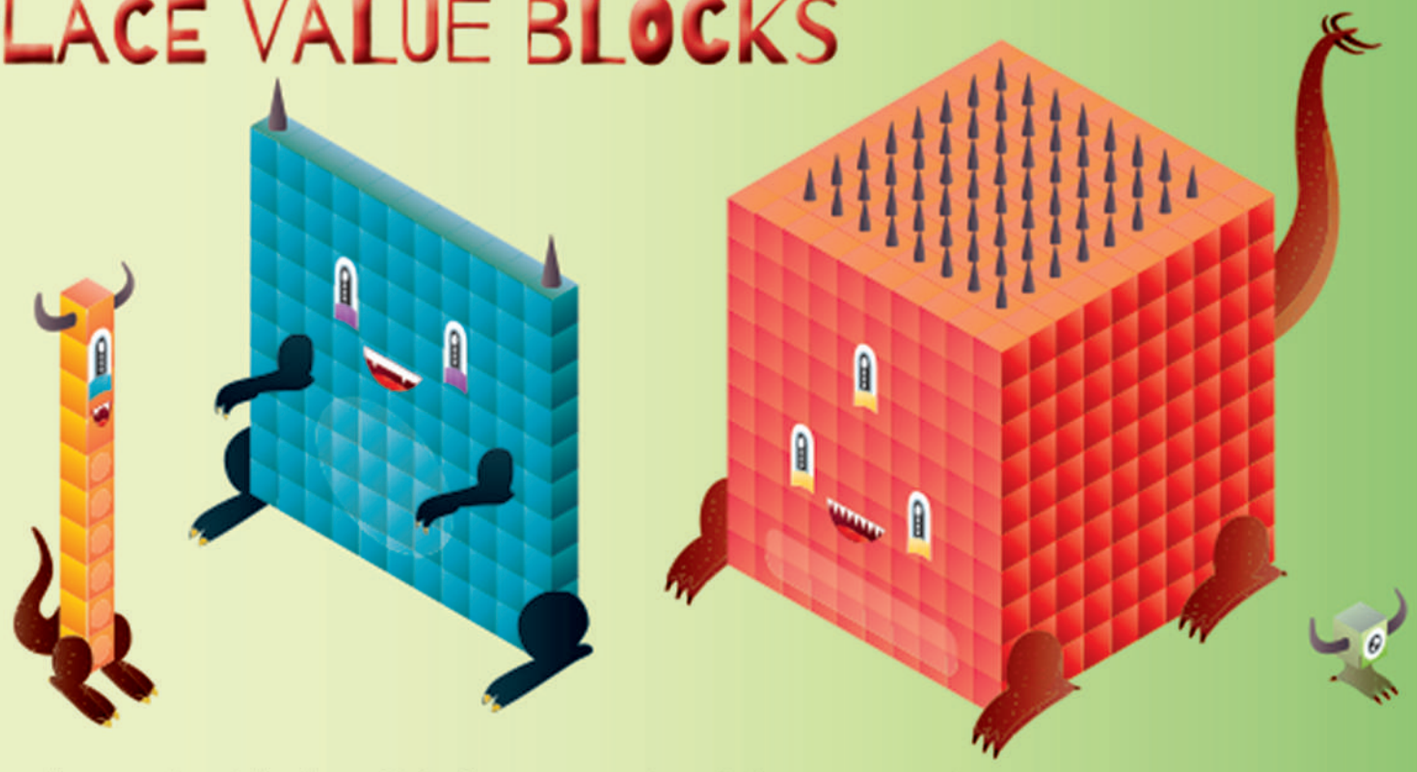
Card 1

Answers

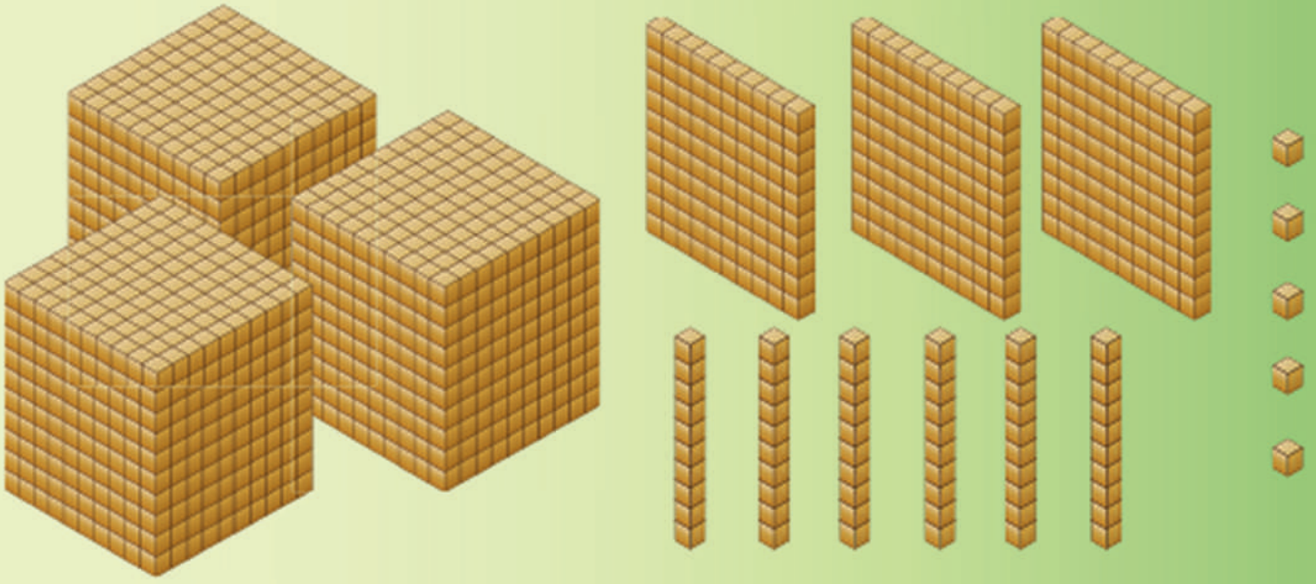


1. 2, 5, 7, 9
2. 8, 7, 4, 1
3. (a) 0
4. (c) 1
5. (b) 10
6. (a) 3
7. (c) 9
8. (b) $\frac{5}{10}$
9. (a) $\frac{3}{10}$
10. (b) $\frac{2}{10}$
11. (a) $\frac{1}{10}$
12. (b) $\frac{4}{10}$

PLACE VALUE BLOCKS



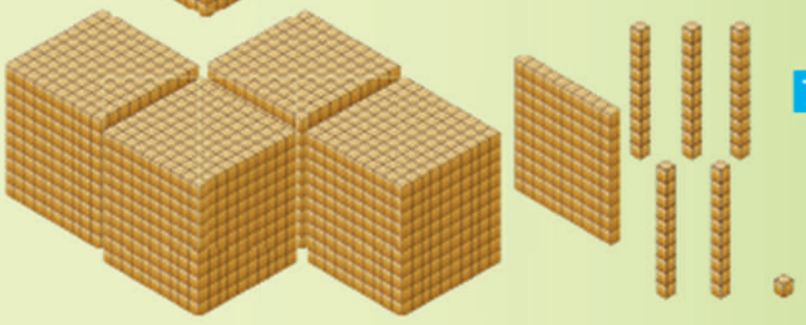
The place value blocks will help you work out the answers!



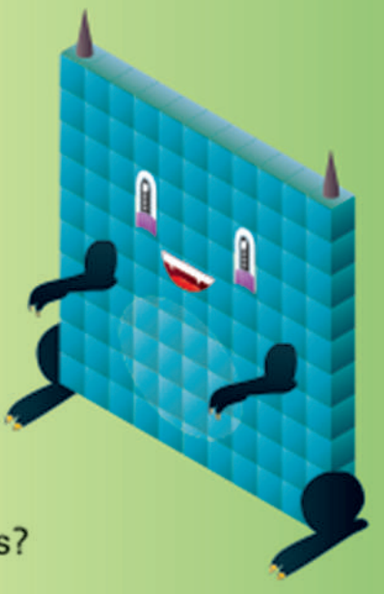
1. Which number does this group of place value blocks represent?
   (a) 3325 (b) 3365 (c) 4365
2. How many thousands are shown?
3. How many hundreds are shown?
4. There are ..... tens shown.
5. There are ..... ones shown.

Card 6

6 What number does this group of place value blocks represent?



7 The number ..... is represented by the place value blocks.



Expand the numbers as in the example below:

5892 = 5000 + 800 + 90 + 2

8 1936

9 4677

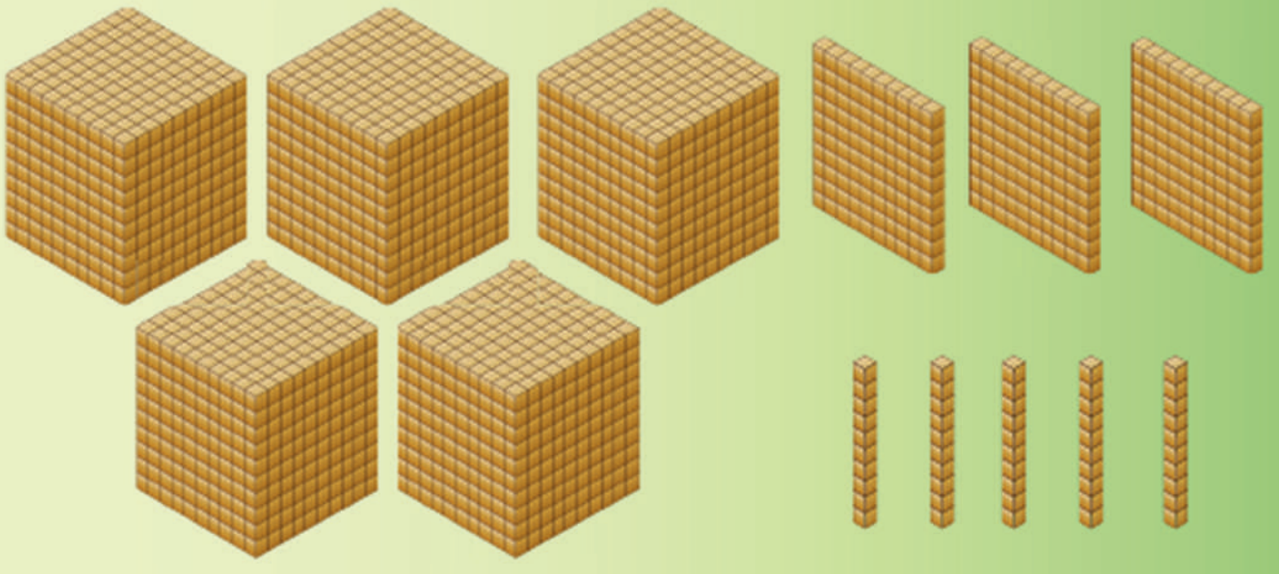
10 3928

11 5720

12 9045

13 7209

14 What number is represented by the place value blocks?



ADDitional Activity

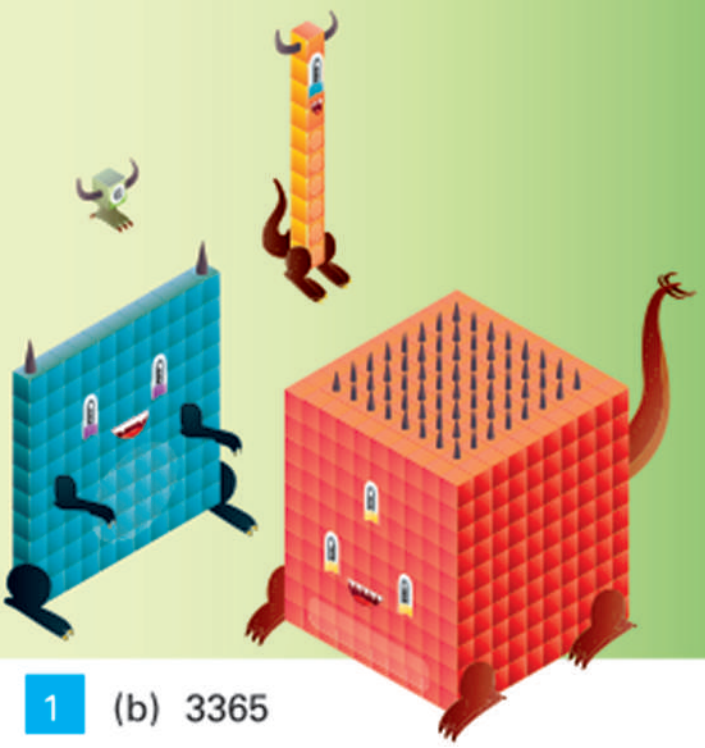
- Use place value blocks to represent these numbers:

  4927 3129 5880 1045 2628

Card 6

Answers

PLACE VALUE BLOCKS



1	(b) 3365
2	3 thousands
3	3 hundreds
4	6
5	5
6	2246
7	4151
8	1000 + 900 + 30 + 6
9	4000 + 600 + 70 + 7
10	3000 + 900 + 20 + 8
11	5000 + 700 + 20
12	9000 + 40 + 5
13	7000 + 200 + 9
14	5350

REAL LIFE ANGLES

1. Which of the coloured angles are greater than 90° but less than 180°?
   (a) red and blue (b) yellow and purple (c) orange and white

2. Angles that are greater than 90° and less than 180° are called ..... angles.
   (a) reflex (b) obtuse (c) right

3. **True** or **False**?
   The blue angle is greater than the yellow angle because its arms are longer.

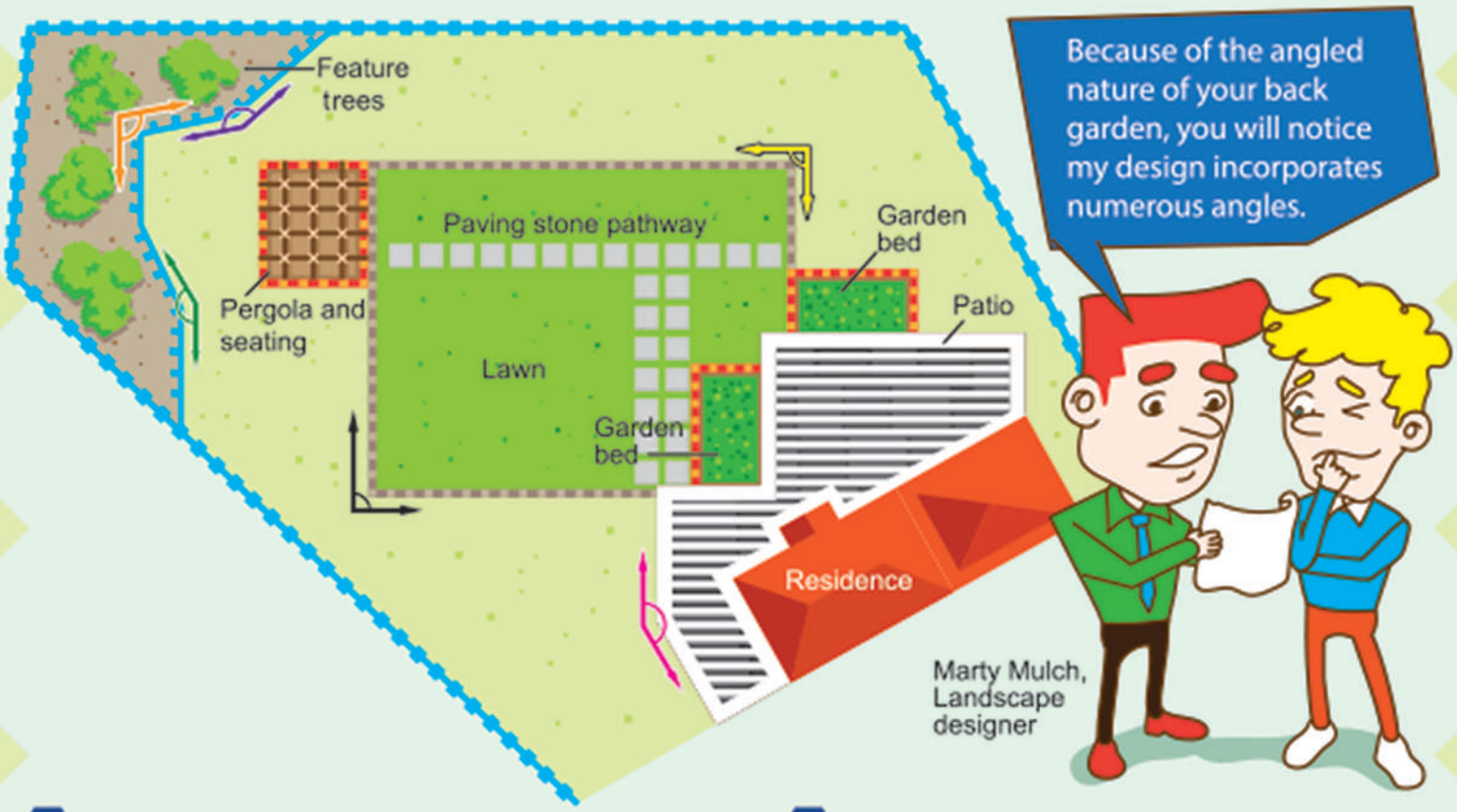
4. The yellow, purple and ..... angles are all right angles.

5. Which angle is an acute angle?
   (a) the red angle (b) the green angle (c) the white angle

6. The ..... angle is a straight angle.

7. The common end point of two rays of an angle is called the .....

Card 3



8 How many reflex angles are there?

(a) 0 (b) 1 (c) 2

9 The obtuse angles in the design are coloured pink, orange, green and .....

10 What colours are the angles that measure 90° and what is that type of angle called?

11 Which angles measure less than the orange coloured angle?

12 Which statement is true?

(a) Acute angles measure greater than 90° but less than 180°.

(b) One straight angle measuring exactly 180° is coloured on the landscape design.

(c) Many obtuse angles measuring between 90° and 180° are evident in the landscape design.

13 Which statement is incorrect?

(a) The majority of the angles around the paved stone pathway, lawn and garden beds are obtuse angles.

(b) Some coloured angles identified are acute angles.

(c) The yellow angle plus the black angle equals 180°.

14 Which word completes the statement?

One ..... is a full turn to end up at the start and equals 360°.

(a) reflection

(b) reflex

(c) rotation

ADDitional Activity

- Enlarge one of the plans on grid paper using a ruler, then use a protractor to measure the angles.

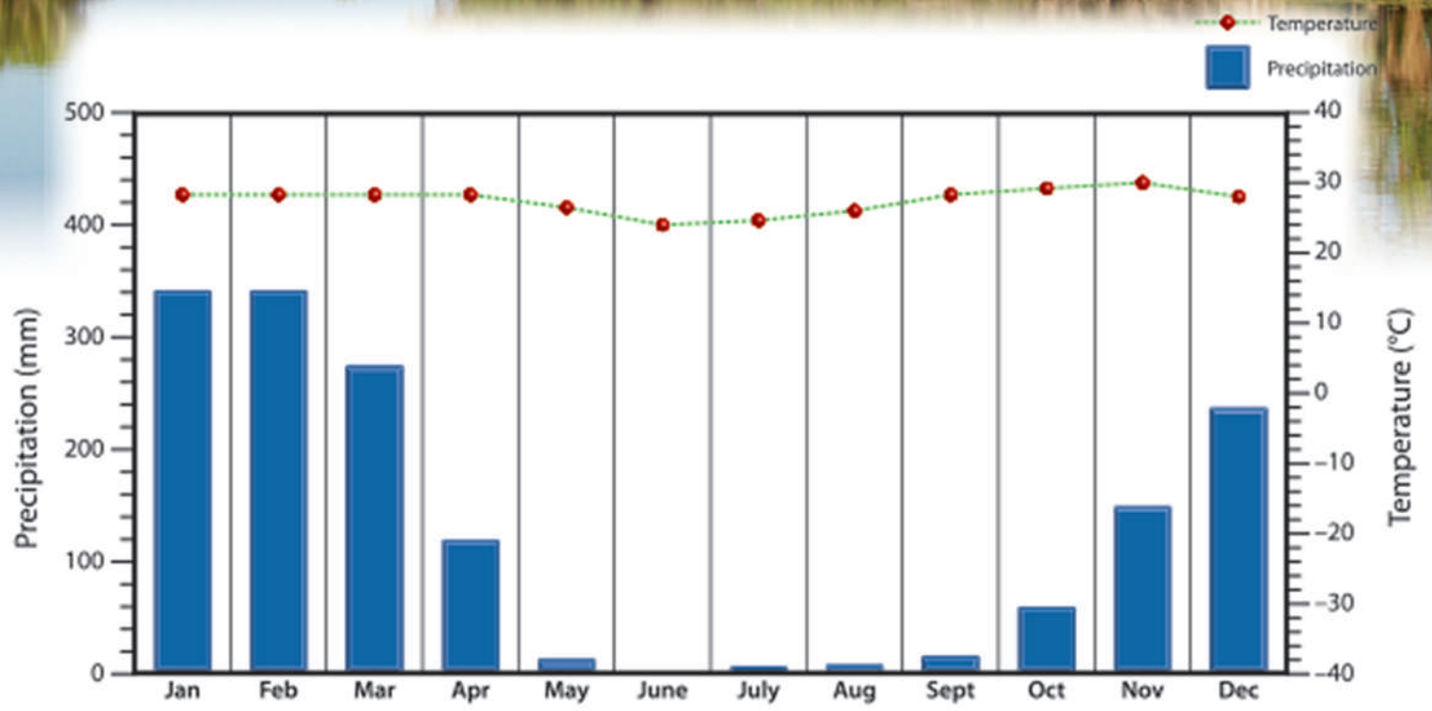
Answers

REAL LIFE ANGLES

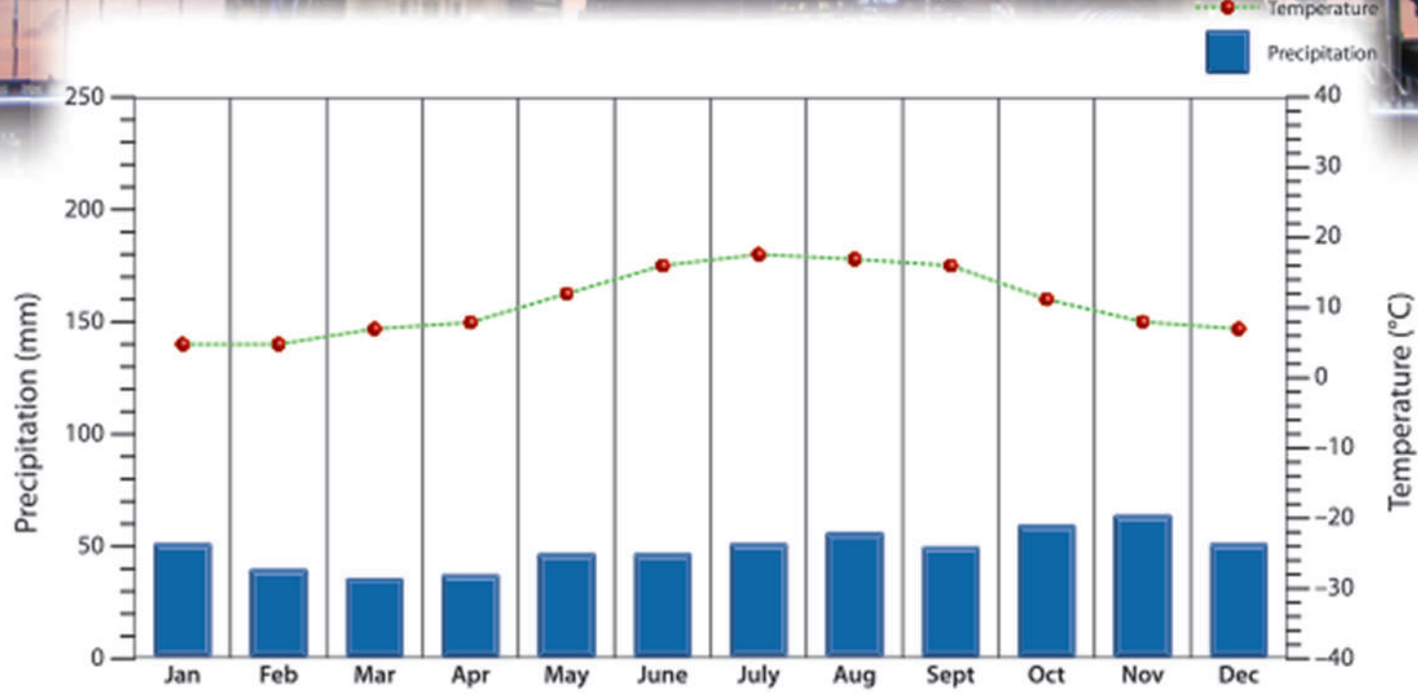
1. (c) orange and white
2. (b) obtuse
3. False
4. blue
5. (a) the red angle
6. green
7. vertex
8. (a) 0
9. purple
10. black and yellow, right angle
11. black and yellow
12. (c) Many obtuse angles measuring between 90° and 180° are evident in the landscape design.
13. (b) Some coloured angles identified are acute angles.
14. (c) rotation

WHERE WOULD YOU LIVE?

AVERAGE TEMPERATURES AND PRECIPITATION FOR DARWIN, AUSTRALIA



AVERAGE TEMPERATURES AND PRECIPITATION FOR LONDON, ENGLAND



Card 3

1 What types of graph are presented?

(a) bar chart and pie chart

(b) bar chart and line graph

2 What information is presented on the graphs?

(a) average temperatures and precipitation per month

(b) maximum temperatures and precipitation per month

(c) minimum temperatures and precipitation per month

3 A tropical wet/dry climate has constantly high temperatures and 6 months of high rainfall. Which city does NOT have a tropical wet/dry climate?

(a) Darwin

(b) London

4 What is the difference in January rainfall between Darwin and London?

(a) 290 mm

(b) 24 °C

5 **True** or **False**? London's maximum temperature was greater than Darwin's minimum temperature.

6 **True** or **False**? The difference between London's and Darwin's July temperatures is 7 °C.

7 Select the correct statement.

(a) London had more rain than Darwin in November.

(b) London and Darwin had equal rain in November.

(c) London had less rain than Darwin in November.

8 What is the increment value on the precipitation axis of the second graph?

9 What is the increment value on the temperature axis of the first graph?

10 **True** or **False**? Both graphs have the same increment on the precipitation axes.

11 **Yes** or **No**? London is hotter than Darwin in June.

12 **Yes** or **No**? London has more rain than Darwin in April.

13 **True** or **False**? Darwin has an average of 10 cm of rainfall in May.

14 **True** or **False**? London's average temperature drops below zero.

15 The highest average temperature for Darwin is over:

(a) 25 °C

(b) 35 °C

(c) 40 °C

16 How many months of the year does Darwin have more than 200 mm of rain?

ADDitional Activity

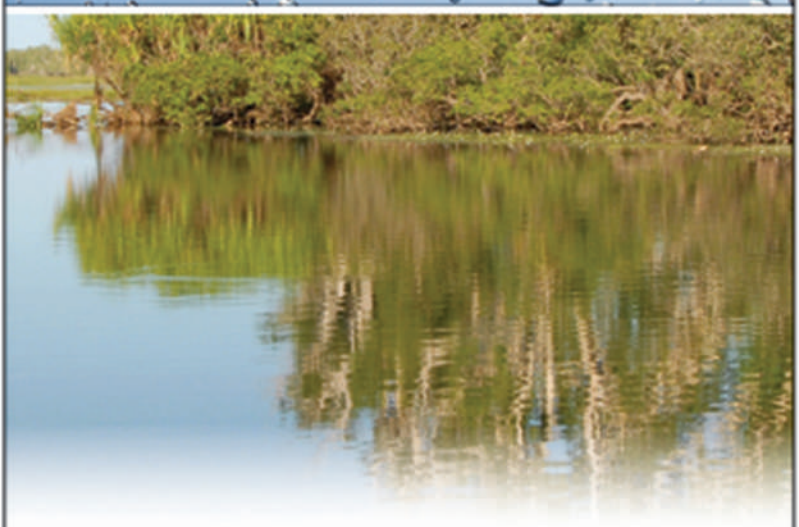
Use the Internet to research average rainfall and temperatures of cities around the world.

- Go to: <http://www.weather-and-climate.com/>
- Click on a country of interest and select a city.

Card 3

Answers

WHERE WOULD YOU LIVE?



1. (b) bar chart and line graph
2. (a) average temperatures and precipitation per month
3. (b) London
4. (a) 290 mm
5. False
6. True
7. (c) London had less rain than Darwin in November.
8. 10 mm
9. 2 °C
10. False
11. No
12. No
13. True
14. False
15. (a) 25 °C
16. 4 months