Answers

Unit 1 Number and Place Value
IA Place value and comparing 3-digit numbers: Discover – Accept all accurate answers where each digit is less than 7. Eight sentences are required.

IA Place value and comparing 3-digit numbers: Explore – Accept all accurate answers where each digit is less than 7. Three number comparisons are expected.

IB Estimation and rounding: Discover
Accept any 5 from each group

| Numbers that round to 50 to the nearest 10 | 45, 46, 47, 48, 49, 50, 51, 52, 53, 54 |
| Numbers that round to 500 to the nearest 100 | Any number between 450 and 549 inclusive |
| Numbers that round to 360 to the nearest 10 | Any number between 355 and 364 inclusive |
| Numbers that round to 700 to the nearest 100 | Any number between 650 and 749 inclusive |
| Numbers that round to 1000 to the nearest 1000 | Any number between 950 and 1049 inclusive |
| Numbers that round to 200 to the nearest 10 | Any number between 195 and 204 inclusive |
| Numbers that round to 940 to the nearest 10 | Any number between 985 and 994 inclusive |
| Numbers that round to 1000 to the nearest 10 | Any number between 995 and 1004 inclusive |
| Numbers that round to 750 to the nearest 10 | Any number between 745 and 754 inclusive |
| Numbers that round to 500 to the nearest 10 | Any number between 495 and 505 inclusive |

IC Number sequences: Discover
Count back in fours from 48: 48, 44, 40, 36, 32, 28, 24, 20, 16, 12.
Count on in twos from 39: 39, 41, 43, 45, 47, 49, 51, 53, 55, 57.
Count on in threes from 39: 39, 42, 45, 48, 51, 54, 57, 60, 63, 66.
Count back in threes from 50: 50, 47, 44, 41, 38, 35, 32, 29, 26, 23.
Count back in fours from 36: 36, 32, 28, 24, 20, 16, 12, 8, 4, 0.
Count back in fives from 49: 49, 44, 39, 34, 29, 24, 19, 14, 9, 4.
Count on in fours from 21: 21, 25, 29, 33, 37, 41, 45, 49, 53, 57.
Count back in fives from 40: 40, 35, 30, 25, 20, 15, 10, 5, 0, –5.

IC Number sequences: Explore – Accept all accurate answers which follow the instructions.

I Review – Accept all accurate answers where the starting numbers have digits less than 7.
The starting number and the last number are always the same.
You add and subtract the same total across the number track.
The biggest number is 6531.
It has 6 in the thousands column.
It has 1 in the ones column.
The smallest number is 1356.
It has 5 in the tens column.
It has 3 in the hundreds column.

Unit 2 Fractions
2A Halves and equivalent fractions: Discover – Accept any four equivalent fractions for a half.
False True

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2A Halves and equivalent fractions: Explore

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3, 6, 12, 24, 48
1, 2, 4, 8, 16
5, 10, 20, 40, 80
2, 4, 8, 16, 32
4, 8, 16, 32, 64

2B Finding fractions of shapes and numbers: Discover

For each question check that fractions are placed correctly on the number line.

1. \( \frac{1}{10}, \frac{2}{4}, \frac{3}{2}, \frac{9}{10} \)
2. \( \frac{1}{3}, \frac{1}{2}, \frac{3}{4}, \frac{2}{10}, \frac{2}{2} \)
3. \( \frac{1}{4}, \frac{9}{10}, \frac{1}{10}, \frac{3}{4}, \frac{2}{5}, \frac{2}{7}, \frac{8}{10} \)
4. \( \frac{1}{10}, \frac{2}{5}, \frac{7}{3}, \frac{8}{10} \)

2B Finding fractions of shapes and numbers: Explore

2a. 5
2b. 3
2c. 7
3a. 3
3b. 2
3c. 4

2 Review

Check that fractions are placed accurately on the number line. There should be 8 fractions.

Unit 3 Mental Calculation

3A Mental strategies for addition and subtraction: Discover – Accept all accurate answers.

3A Mental strategies for addition and subtraction: Explore – Accept all accurate answers. There should be 5 ways of finding the answers of 18, 3 and 13.

3B Mental strategies for multiplication and division: Discover – Accept all accurate answers where the starting number is less than 7.

3B Mental strategies for multiplication and division: Explore

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3 Review
Accept all accurate answers with the correct values in the Carroll diagrams. There should be 5 numbers in each section.

Unit 4 Addition and Subtraction
4A Adding and subtracting multiples of 10 and 100: Discover – Accept all accurate answers.
4A Adding and subtracting multiples of 10 and 100: Explore – Accept all accurate answers.
4B Adding several small numbers: Discover – Accept all accurate answers for calculations using addition and answers. The biggest and smallest answers need to be identified.
4B Adding several small numbers: Explore – Accept all accurate answers for calculations using subtraction and answers. The biggest and smallest answers need to be identified.
4C Adding pairs of 2- and 3-digit numbers: Discover – Accept all accurate answers.
4C Adding pairs of 2- and 3-digit numbers: Explore
1. 52, 72, 124
2. 117, 102, 219
3. 40, 51, 91
4. 30, 60, 90
5. 198, 198, 396
4D Adding and subtracting numbers:
Discover
1. 132
2. 305
3. 483
4. 546
5. 990
6. 110
7. 701
8. 299
9. 392
10. 492
4D Adding and subtracting numbers: Explore – Accept all accurate answers for 4 word problems involving adding and subtracting of 2- and 3-digit numbers.

Unit 5 Multiplication and Division
5A Multiplying and dividing numbers: Discover
1. $24 \times 1 = 24$; $1 \times 24 = 24$; $2 \times 12 = 24$; $12 \times 2 = 24$; $3 \times 8 = 24$; $8 \times 3 = 24$; $4 \times 6 = 24$; $6 \times 4 = 24$
2. $16 \times 1 = 16$; $1 \times 16 = 16$; $2 \times 8 = 16$; $8 \times 2 = 16$; $4 \times 4 = 16$
3. $1 \times 12 = 12$; $12 \times 1 = 12$; $2 \times 6 = 12$; $6 \times 2 = 12$; $3 \times 4 = 12$; $4 \times 3 = 12$
4. $1 \times 30 = 30$; $30 \times 1 = 30$; $2 \times 15 = 30$; $15 \times 2 = 30$; $3 \times 10 = 30$; $10 \times 3 = 30$; $5 \times 6 = 30$; $6 \times 5 = 30$
5. $1 \times 25 = 25$; $25 \times 1 = 25$; $5 \times 5 = 25$
5A Multiplying and dividing numbers: Explore – Accept all accurate answers.

5B Multiplying teens numbers by 3 and 5: Discover – Accept all accurate answers.

5B Multiplying teens numbers by 3 and 5: Explore – Accept all accurate answers.

5C Dividing numbers with remainders: Discover
1. exactly 15 pieces of fruit
2. exactly 10 pieces of fruit
3. 7 pieces of fruit with 2 left over
4. exactly 6 pieces of fruit
5. exactly 5 pieces of fruit
6. 4 pieces of fruit with 2 left over
7. 3 pieces of fruit with 6 left over
8. 3 pieces of fruit with 3 left over
9. exactly 3 pieces of fruit
10. 2 pieces of fruit with 8 left over
11. 2 pieces of fruit with 6 left over
12. 2 pieces of fruit with 4 left over
13. 2 pieces of fruit with 2 left over
14. exactly 2 pieces of fruit
5C Dividing numbers with remainders: Explore – Accept all accurate answers.
5C Dividing numbers with remainders: Explore – Accept all accurate answers. Expect 6 division statements.

5 Review – Accept all accurate answers.

Unit 6 Shapes and Geometry

6A Identifying and classifying polygons: Discover

- square
- rectangle
- irregular quadrilateral
- equilateral triangle
- regular pentagon
- irregular hexagon
- irregular octagon
- regular octagon

6A Identifying and classifying polygons: Explore

1. Parallelogram or rectangle
2. Irregular hexagon
3. Equilateral triangle
4. Scalene triangle or right-angled triangle
5. Irregular pentagon
6. Circle
7. Semicircle
8. Regular octagon
9. Square

6B Properties of 3D shapes: Discover

- Cube
- Cylinder
- Sphere
- Square-based pyramid
- Cone
- Triangular prism
- Cuboid

6B Properties of 3D shapes: Explore – Accept all accurate answers.

6C Drawing and completing 2D shapes: Discover – Accept all accurate answers. All shapes must be symmetrical.

6C Drawing and completing 2D shapes: Explore – Accept all accurate answers. The shape should be symmetrical and the names of the 2 polygons used in the shape need to be given.

6 Review

1. 2D
2. 2D
3. 3D
4. 3D
5. 2D
6. 2D
7. 2D
8. 3D
9. 2D
10. 3D
11. 3D
12. 2D

Accept all accurate properties. Two at least are required for each shape.

Unit 7 Position and Movement

7A Using a grid to describe position: Discover – Accept all accurate answers to get from one object to another. Four sets of instructions are required.

7A Using a grid to describe position: Explore – Accept all accurate answers to describe the location of an object.

7B Drawing right angles and comparing angles: Discover – Accept all accurate answers.

7B Drawing right angles and comparing angles: Explore – Accept all accurate answers for instructions to walk through a maze using quarter turns.

7 Review – Accept all accurate sentences. At least 6 are required.
Unit 8 Length, Mass and Capacity

8A Choosing appropriate units and converting units: Discover – Accept all accurate answers which can be measured using the units shown. List objects which can be 1 litre, 1 kilogram, 1 kilometre and 1 metre when measured.

8A Choosing appropriate units and converting units: Explore
1.5km = 1500m
0.5m = 500cm
3.5m = 350cm
7km = 7000m
4.5l = 4500ml
5.5l = 5500ml
4.5kg = 4500g
0.5kg = 500g
8.5kg = 8500g

8B Solving word problems involving measures: Discover
1. 2000m = 2 km
2. 4000 g = 4 kg
3. 800ml = 0.8l

8B Solving word problems involving measures: Explore – Accept all accurate word problems.

8C Constructing accurately using measures: Discover – Accept all appropriate answers.

8C Constructing accurately using measures: Explore – Accept all appropriate answers including the conclusion as to whether taller people can hold more water.

8 Review

1.

2.

Unit 9 Time

9A Knowing the relationship between units of time: Discover

JUNE 2015

9A Knowing the relationship between units of time: Explore

1. 7
2. 30
3. 4
4. 9
5. 12
6. 8
7
52
365 and 366
1. 600
2. 300
3. 168
4. 104
5. Any accurate answer.

The table needs to be completed with the correct number of days for each month.

9B Reading time to the nearest minute:
Discover – Accept all accurate and sensible answers.

9B Reading time to the nearest minute:
Explore

9C Calculating time intervals:
Discover – Accept all accurate and sensible answers.

9C Calculating time intervals:
Explore
1. 120 minutes
2. Top Gear and Penn Zero
3. 90 minutes or 1.5 hours
4. Star Trek and Mighty Med
5. Accept any accurate answer.
Accept all appropriate questions. Five are required.

9D Reading a calendar:
Discover – Accept all accurate and sensible answers.

9D Reading a calendar:
Explore – Accept all accurate and sensible answers.

9 Review
1. 61
2. 95
3. 18
4. 270
5. 12
6. 28
7. 22:35
8. 18:45

Unit 10 Data Handling
10A Tally and bar charts, frequency tables and pictograms:
Discover – Accept all accurate and sensible answers.

10A Tally and bar charts, frequency tables and pictograms:
Explore – Accept all accurate and sensible answers.

10B Venn diagrams and Carroll diagrams:
Discover – Accept all accurate and sensible answers. One Carroll diagram is completed and 2 new ones created.

10B Venn diagrams and Carroll diagrams:
Explore – Accept all accurate and sensible answers. There should be 2 Venn diagrams.

10 Review – Accept all accurate and sensible answers. The Venn diagram needs to be interpreted correctly and the Carroll diagram completed correctly.