Isolation Pack I Maths I Week 2

Day 1

Round those numbers to the nearest 10, 100 (or 1000). Attempt two blocks today please. So go Mild and Hot or Hot and Extra Hot. Challenges can be found on page 4.

Mild – Block A Hot – Block B Extra Hot – Block C

Day 2

See if you can recall your factors of numbers. Remember, these are numbers than can be multiplied together to make a product (the answer to a multiplication calculation). Some numbers can have more than 2 factors remember. Challenges can be found on page 5.

Mild – Block A Hot – Block B Extra Hot – Block C

Day 3

Answer the calculations.

Mild Challenge – Use the squares to show the working out.

Hot Challenge - Answer the calculations. You may have to change the denominator on some of the them. Remember – whatever you do to the denominator you must do the same to the numerator.

Day 4

Mild Challenge – Use the carrots to work out the fraction of amounts. (Either cut them out or draw out). Use a bar model to help you if you need.

Hot Challenge – Answer the calculations – make sure you read the question carefully. Draw out a bar model to help you.

Day 5

Mild Challenge – Fill in the part whole models

Hot Challenge – Shade in the mixed number representations and fill in the part whole model. You can print it out or draw the representations.

TARGET To round any number to the nearest 10, 100 or 1000.

Always look at the column to the right of that to which you are rounding.
If the number in that column is: 5 or more, round up
less than 5, round down

Examples

TO THE NEAREST 10
8438 rounds to 8440
6571 rounds to 6570
925 rounds to 930

TO THE NEAREST 100
8438 rounds to 8400
6571 rounds to 6600
925 rounds to 900

TO THE NEAREST 1000
8438 rounds to 8000
6571 rounds to 7000
925 rounds to 1000

A

Round to the nearest 10.

1. 67
2. 31
3. 45
4. 79
5. 24
6. 52
7. 18
8. 86
9. 63
10. 95

Round to the nearest 100.

11. 320
12. 471
13. 948
14. 854
15. 283
16. 590
17. 819
18. 253
19. 160
20. 737

Round to the nearest pound.

21. £6·50
22. £8·80
23. £5·10
24. £4·60
25. £2·30
26. £9·20
27. £5·90
28. £2·70
29. £7·40
30. £3·50

B

Round to the nearest 10.

1. 136
2. 841
3. 529
4. 263
5. 915
6. 2692
7. 4357
8. 1034
9. 3715
10. 8478

Round to the nearest 100.

11. 4728
12. 253
13. 2561
14. 837
15. 1484
16. 5205
17. 3193
18. 2946
19. 9371
20. 6652

Round to the nearest:
a) 10 **b)** 100 **c)** 1000.

21. 1284
22. 881
23. 5929
24. 8754
25. 3275
26. 6592
27. 9415
28. 4163
29. 2607
30. 7358

C

Round to the nearest 10.

1. 11 344
2. 42 717
3. 35 285
4. 73 162
5. 121 559
6. 53 450
7. 117 076
8. 22 923
9. 234 395
10. 390 831

Round to the nearest 100.

11. 24 183
12. 50 815
13. 172 262
14. 16 747
15. 298 354
16. 502 526
17. 47 391
18. 631 653
19. 180 438
20. 363 972

Round to the nearest:
a) 10 **b)** 100 **c)** 1000.

21. 62 361
22. 118 097
23. 49 505
24. 30 153
25. 291 838
26. 27 014
27. 104 286
28. 53 472
29. 215 625
30. 170 059

TARGET To recognise and use factor pairs in mental calculations.

Examples

$18 \times 15 = 18 \times 3 \times 5$
$= 90 \times 3$
$= 270$

$144 \div 16 = 144 \div 2 \div 8$
$= 72 \div 8$
$= 9$

$480 = \square \times 6$
$48 = 8 \times 6$
$480 = 80 \times 6$
Missing number is 80.

A

Complete the factor pairs.

1. The factor pairs of 8.
   1 and ☐ 2 and ☐
2. The factor pairs of 10.
   ☐ and 2 ☐ and 10
3. The factor pairs of 21.
   21 and ☐ ☐ and 3
4. The factor pairs of 22.
   1 and ☐ ☐ and ☐
5. The factor pairs of 12.
   1 and ☐ 2 and ☐
   3 and ☐
6. The factor pairs of 18.
   ☐ and ☐ ☐ and ☐
   ☐ and ☐

Find pairs of factors for each target number.

7. 6 (2 pairs)
8. 9 (2 pairs)
9. 14 (2 pairs)
10. 15 (2 pairs)
11. 16 (3 pairs)
12. 20 (3 pairs)

B

Find all the factors of each target number. The number of factors is shown in brackets.

1. 13 (2)
2. 28 (6)
3. 32 (6)
4. 40 (8)
5. 48 (10)
6. 54 (8)
7. 60 (12)
8. 72 (12)
9. 88 (8)
10. 100 (9)
11. 126 (12)
12. 144 (15)

Break down the second number into factors to help work out each problem.

13. 18×6
14. 16×8
15. 22×12
16. 15×18
17. $84 \div 4$
18. $210 \div 14$
19. $96 \div 6$
20. $108 \div 12$

Find a pair of factors to solve each missing number problem.

21. $140 = \square \times 20$
22. $270 = 9 \times \square$
23. $150 = 50 \times \square$
24. $280 = \square \times 4$
25. $420 = \square \times 60$
26. $320 = 4 \times \square$

C

Find all the factors of:

1. 66
2. 96
3. 114
4. 150
5. 128
6. 121
7. 143
8. 135
9. 156
10. 131
11. 196
12. 180

Break the second number down into factors to help work out each problem.

13. 28×16
14. 24×25
15. 22×18
16. 31×24
17. $168 \div 12$
18. $176 \div 22$
19. $165 \div 15$
20. $147 \div 21$

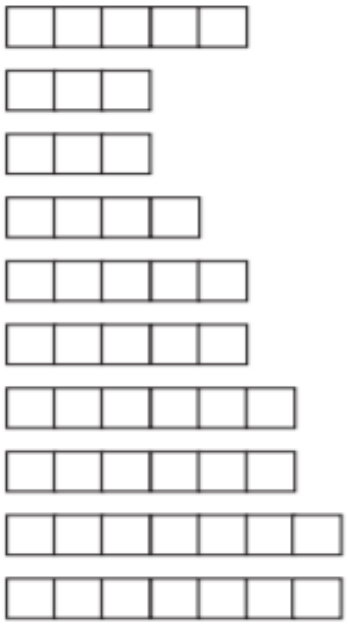
Find the highest factor shared by:

21. 15 and 40
22. 18 and 24
23. 12 and 20
24. 30 and 50
25. 32 and 56
26. 18 and 45
27. 14 and 63
28. 22 and 55
29. 28 and 42
30. 32 and 48

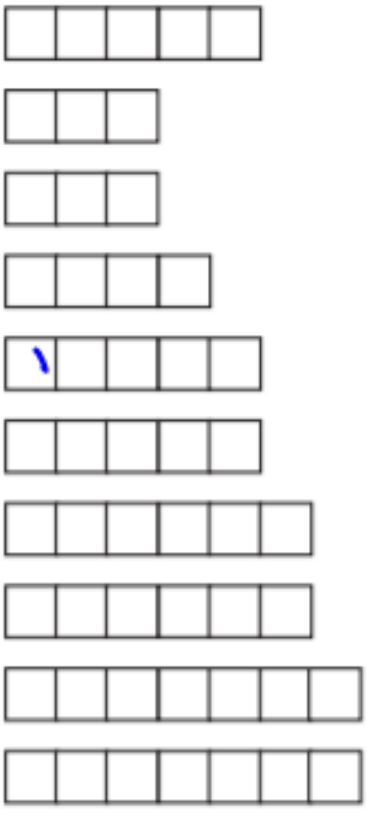
Mild Challenge

Week 2 Day 3

1. $\frac{2}{5} + \frac{1}{5} =$ ____
2. $\frac{1}{3} + \frac{2}{3} =$ ____
3. $\frac{1}{3} + \frac{1}{3} =$ ____
4. $\frac{2}{4} + \frac{1}{4} =$ ____
5. $\frac{3}{5} + \frac{2}{5} =$ ____
6. $\frac{3}{5} + \frac{1}{5} =$ ____
7. $\frac{3}{6} + \frac{1}{6} =$ ____
8. $\frac{2}{6} + \frac{3}{6} =$ ____
9. $\frac{4}{7} + \frac{2}{7} =$ ____
10. $\frac{1}{7} + \frac{5}{7} =$ ____



1. $\frac{2}{5} - \frac{1}{5} =$ ____
2. $\frac{2}{3} - \frac{1}{3} =$ ____
3. $\frac{1}{3} - \frac{1}{3} =$ ____
4. $\frac{2}{4} - \frac{1}{4} =$ ____
5. $\frac{3}{5} - \frac{2}{5} =$ ____
6. $\frac{3}{5} - \frac{1}{5} =$ ____
7. $\frac{5}{6} - \frac{1}{6} =$ ____
8. $\frac{4}{6} - \frac{3}{6} =$ ____
9. $\frac{4}{7} - \frac{2}{7} =$ ____
10. $\frac{6}{7} - \frac{3}{7} =$ ____



Hot Challenge

Week 2 Day 3

1. 2/6 + 3/6 =
2. 4/10 - 2/10 =
3. 2/6 + 4/12 =
4. 1/3 + 2/6 =
5. 2/3 – 1/3 =
6. 1/3 + 3/9 =
7. 10/14 – 6/14 =
8. 3/4 + 1/12 =
9. 2/8 + 6/16 =

1. $\frac{3}{4} + \frac{5}{12} + \frac{1}{6} + \frac{2}{3} =$

   $\frac{\quad}{12} + \frac{\quad}{12} + \frac{\quad}{12} + \frac{\quad}{12} = \frac{\quad}{12}$

2. $\frac{2}{9} + \frac{5}{18} + \frac{2}{3} + \frac{5}{6} =$

   $\frac{\quad}{18} + \frac{\quad}{18} + \frac{\quad}{18} + \frac{\quad}{18} = \frac{\quad}{18}$

3. $\frac{7}{20} + \frac{4}{5} + \frac{3}{4} + \frac{6}{10} =$

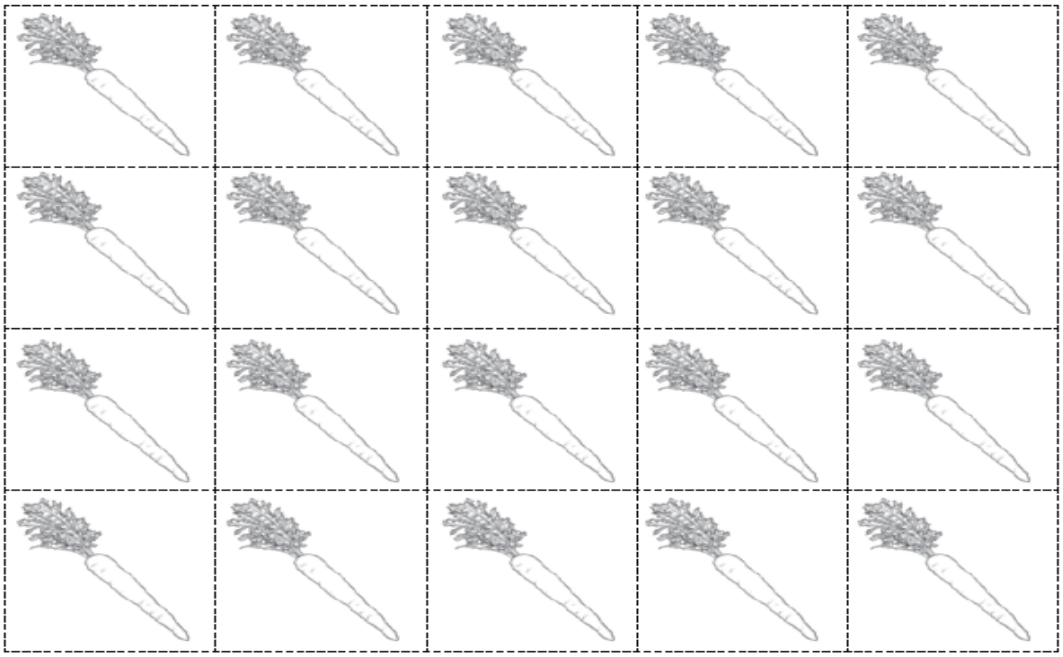
   $\frac{\quad}{20} + \frac{\quad}{20} + \frac{\quad}{20} + \frac{\quad}{20} =$

Mild Challenge

Week 2 Day 4

Draw or cut out the 20 carrots. Share them into groups to find the following fractions.

There are carrots.



$\frac{1}{4}$ of 20 = _____

$\frac{2}{4}$ of 20 = _____

$\frac{3}{4}$ of 20 = _____

$\frac{4}{4}$ of 20 = _____

$\frac{1}{5}$ of 20 = _____

$\frac{2}{5}$ of 20 = _____

$\frac{3}{5}$ of 20 = _____

$\frac{4}{5}$ of 20 = _____

$\frac{5}{5}$ of 20 = _____

Hot Challenge

Week 2 Day 4

1) Clara has 16 cupcakes.

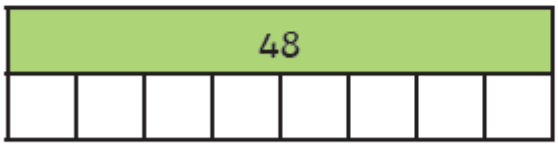
a) Use the counters above to represent Clara's cupcakes and find:

$\frac{1}{2}$ of 16 = ☐ $\frac{1}{4}$ of 16 = ☐ $\frac{1}{8}$ of 16 = ☐

b) Use the answers to the calculations above to help find:

$\frac{2}{2}$ of 16 = ☐ $\frac{3}{4}$ of 16 = ☐ $\frac{5}{8}$ of 16 = ☐

2) Use this bar model to find and represent:



$\frac{1}{8}$ of 48 = 48 ÷ 8 = ☐ $\frac{2}{8}$ of 48 = ☐

$\frac{3}{8}$ of 48 = ☐ $\frac{4}{8}$ of 48 = ☐ $\frac{5}{8}$ of 48 = ☐

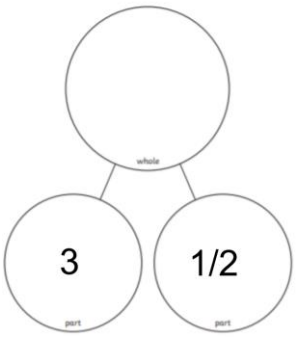
$\frac{6}{8}$ of 48 = ☐ $\frac{7}{8}$ of 48 = ☐ $\frac{8}{8}$ of 48 = ☐

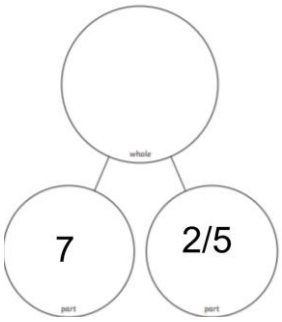
Mild Challenge

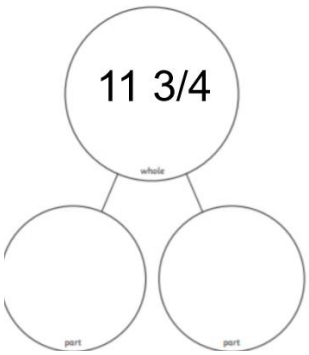
Week 2 Day 5

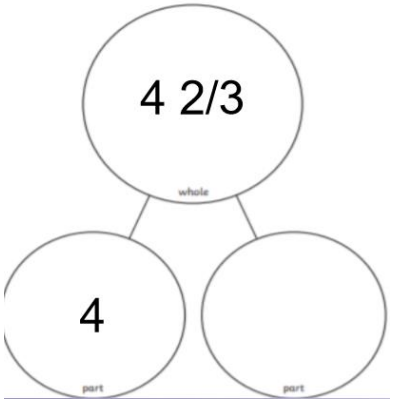
Fill in the missing sections in the part whole model.

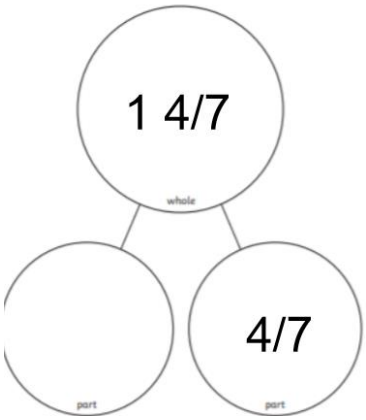
Remember the whole goes in the top, so this will be the mixed number, which we know is a whole number and a fraction. The parts should have a whole number in one and a fraction in the other.







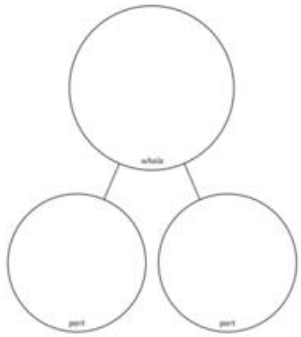

4 2/3
whole
4
part
part


1 4/7
whole
4/7
part
part

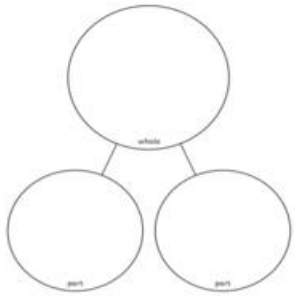
Hot Challenge

Week 2 Day 5

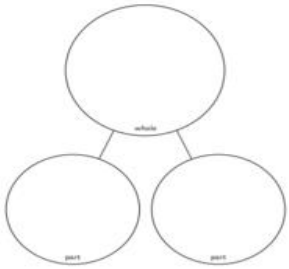
Shade 4 2/5 and complete the part whole model.



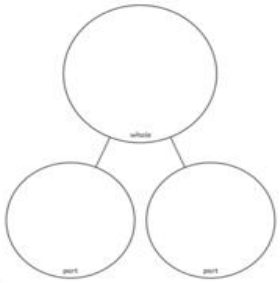
Shade 2 1/3 and complete the part whole model.



Shade 2 6/12 and complete the part whole model.



Shade 4 3/5 and complete the part whole model.



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