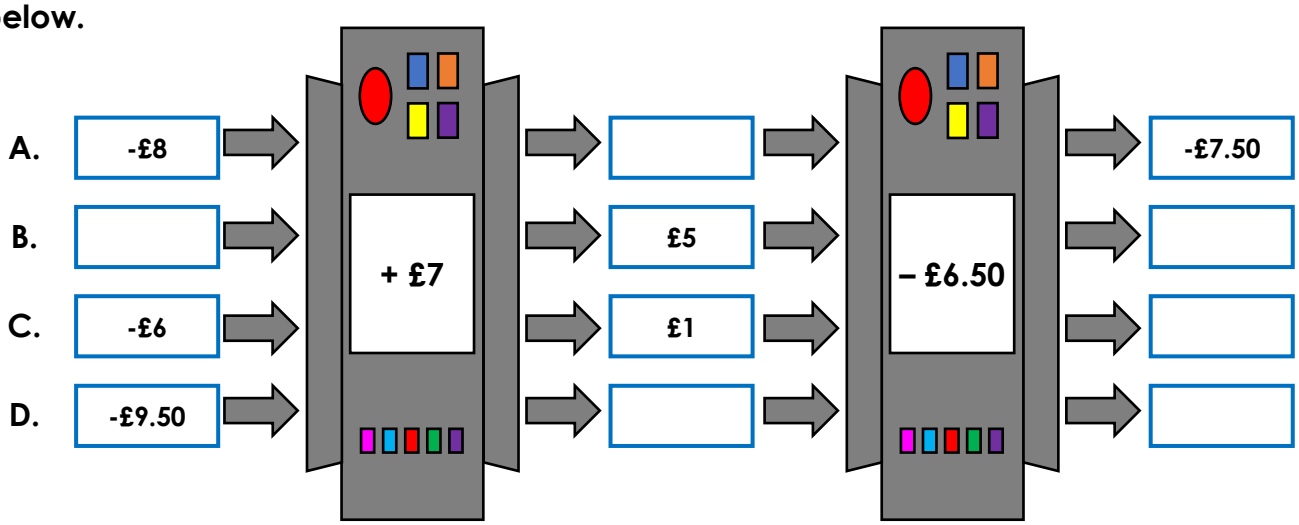
Negative Numbers

1. Work out the answers to the calculations below and place them in the correct columns.

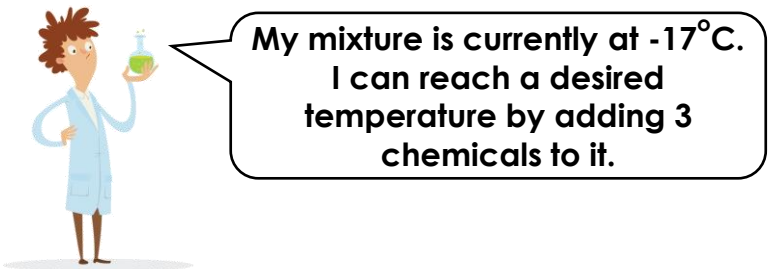
-3 + 9	-10 – 16	7 – -9
3 + -12	-17 + -2	-9 + -4

-10 or below	Between 0 and -10	0 or above

2. A bank has installed some function machines. Find the missing amounts of money below.



3. Dr Banner is trying to get a mixture to reach a temperature between 5°C and 12°C. Is he correct? Find combinations to prove your answer.



Chemical A	Chemical B	Chemical C	Chemical D	Chemical E	Chemical F
+ 2°C	+ 11°C	+ 7°C	+ 4°C	+ 13°C	+ 9°C

Compare and Order

Tarquin is looking to purchase a yacht to add to his collection.

A.

£ 987,641

B.

£ 2,346,725

C.

£ 5,675,899

D.

£ 1,348,009

E.

£ 700,989

F.

£ 3,732,500

G.

£ 4,708,210

H.

£ 1,000,009

Investigate the different number statements you can create using the inequality symbols below.

	<		>	
	>		>	
	<		>	
	>		<	
	<		>	
	<		>	
	<		>	

Order the prices of the boats in descending order.

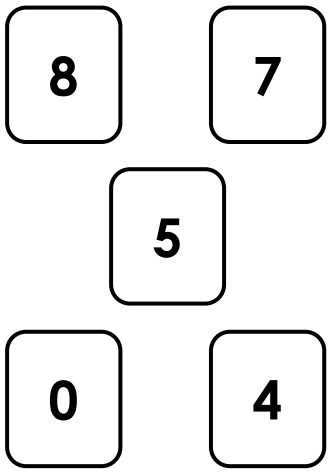
Rounding Numbers

1. Circle the options that show what the number in the place value chart will be when it is rounded to the nearest ten thousand and nearest hundred thousand.

Millions	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
● ●	● ● ● ● ● ●	●	● ● ● ● ● ● ● ●	● ● ● ●		● ● ● ● ● ● ●

- 2,620,000
- Two million, six hundred and ten thousand
- Two million, six hundred thousand
- 2,700,000

2. Use each digit card once to complete both statements.



3 , 0 ☐ 2 , 5 0 8

rounded to the nearest ten thousand is three million

8 , ☐ ☐ 3 , 2 1 1

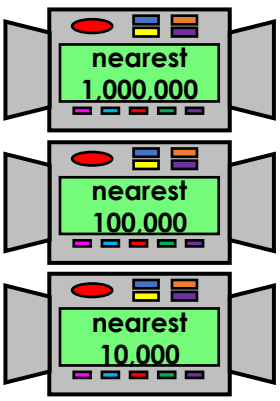
rounded to the nearest hundred thousand is

☐ , ☐ 0 0 , 0 0 0

3. Abigail is thinking of a number. She puts it in these function machines. What could Abigail's number be?

My number has 7 digits, but only one of the digits is even.

?



7,000,000

7,500,000

7,500,000

Monday – Simplify Fractions

1. Paul is simplifying fractions but he has spilt paint over his work.

A. $\frac{18}{36} = \frac{\text{■}}{\text{■}}$

B. $\frac{\text{■}}{24} = \frac{\text{■}}{6}$

C. $\frac{12}{\text{■}} = \frac{\text{■}}{4}$

D. $\frac{30}{\text{■}} = \frac{\text{■}}{5}$

E. $\frac{\text{■}}{\text{■}} = \frac{1}{3}$

F. $\frac{\text{■}}{\text{■}} = \frac{3}{7}$

Calculate possible solutions below.

A. $\frac{18}{36} = \frac{\square}{\square}$

B. $\frac{\square}{24} = \frac{\square}{6}$

C. $\frac{12}{\square} = \frac{\square}{4}$

D. $\frac{30}{\square} = \frac{\square}{5}$

E. $\frac{\square}{\square} = \frac{1}{3}$

F. $\frac{\square}{\square} = \frac{3}{7}$

Tuesday – Compare and Order Denominators

1. Circle the fractions that are less than $\frac{3}{4}$.

A. $\frac{5}{10}$

C. 

B. 

D. $\frac{10}{12}$

2. The sequence below is in ascending order. Draw a line from each fraction below to the correct place in the sequence.

$\frac{2}{6}$, $\frac{1}{2}$, ☐ , ☐ , $\frac{9}{12}$, ☐

$\frac{5}{6}$ $\frac{2}{3}$ $\frac{6}{10}$

3. Ryan has three fractions. He says,

My third fraction has a denominator of 4 and is greater than both of my other fractions.

$\frac{6}{10}$ $\frac{4}{8}$

What is his third fraction? Explain your answer.

Wednesday – Add and Subtract Fractions 2

1. Draw a line to match each calculation to the correct answer.

A. $\frac{3}{7} + \frac{4}{5}$

B. $\frac{2}{3} + \frac{3}{4}$

C. $\frac{3}{5} - \frac{1}{8}$

D. $\frac{5}{6} - \frac{4}{9}$

$\frac{7}{18}$

$\frac{17}{12}$ or $1\frac{5}{12}$

$\frac{19}{40}$

$\frac{43}{35}$ or $1\frac{8}{35}$

2. Harry and Alice are solving the calculation below.

$$\frac{2}{3} - \frac{3}{8} = ?$$

Harry: The answer is $\frac{7}{24}$.

Alice: The answer is $\frac{1}{5}$.

Who is correct?

3. Work out the numbers that are hidden by the splats.

$$\frac{5}{9} + \frac{\square}{\square} = \frac{\square}{72}$$

Find 3 possible answers.

Thursday – Adding Fractions

1. Fill in the symbols >, < or = to make the calculations correct.

$\frac{9}{5} + \frac{12}{11} \quad \square \quad \frac{12}{5} + \frac{11}{11}$

$3\frac{2}{3} + 4\frac{4}{5} \quad \square \quad 5\frac{1}{3} + 1\frac{3}{5}$

$\frac{7}{6} + \frac{9}{4} \quad \square \quad 1\frac{5}{6} + 3\frac{3}{4}$

2. Circle the number statement which will give the same answer as the calculation in the box below.

$\frac{19}{12} + \frac{12}{8}$

A. $1\frac{1}{6} + 1\frac{7}{8}$

B. $\frac{13}{12} + \frac{5}{4}$

C. $1\frac{3}{4} + 1\frac{4}{12}$

D. $\frac{2}{3} + \frac{14}{12}$

E. $1\frac{1}{2} + 1\frac{1}{12}$

F. $\frac{5}{4} + \frac{9}{6}$

3. Shanice and Robert have worked out the answer to the question below. Who is correct? Prove it.

$\frac{12}{3} + \frac{15}{7}$

Robert

I think the answer is $6\frac{3}{21}$

I think the answer is $\frac{129}{21}$

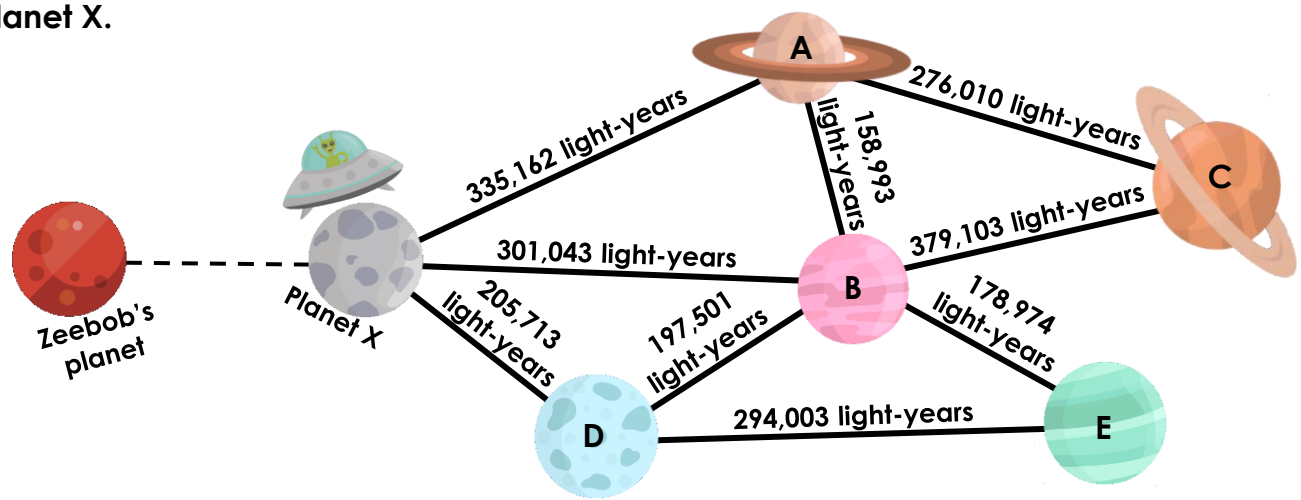
Shanice

Monday – Add and Subtract Integers

1. Zeebob the alien wants to visit three different planets. The journeys he can make, and the distance between the planets in light-years, are shown on his map below.

Zeebob travels from his home planet and arrives on Planet X.
He then visits two more planets. Altogether, he has travelled a total of 957,487 light-years.

Investigate how many light-years there might be between Zeebob's home planet and Planet X.



Planets visited	Distance Travelled	Distance to Planet X
	+	−
	+	−
	+	−

Tuesday – Multiply 4-Digits by 2-Digits

1. Mrs. Peters gives three of her children a calculation each.

Andrew

21 x 4,143

Belinda

2,123 x 24

Charles

12 x 7,133

Which pupil has the smallest answer?

2. A bakery sells boxes of cupcakes. There are 16 cupcakes in a box. Last year, the bakery sold 1,521 boxes. How many cupcakes did they sell?

The bakery also sells muffins with sprinkles on the top. In one month, they used 2,138 sprinkles. How many sprinkles will they use in the whole year?

3. Melanie is using the digit cards below to complete a multiplication. She wants to find calculations which have answers between 25,000 and 35,000.

1	2	3	3	4

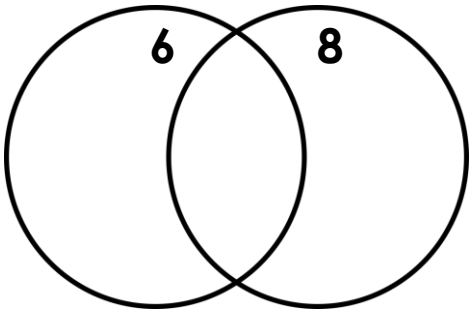
$$\square\square,2\square1 \times 1\square$$

Use the digit cards to find three calculations she could complete.

Wednesday – Common Multiples

1. Use the multiplication facts to sort the multiples into the Venn diagram.

56 12 48
42 24 96
18 72 32



Key Facts
6 x 1 = 6
6 x 2 = 12
6 x 5 = 30
6 x 10 = 60
6 x 12 = 72

Key Facts
8 x 1 = 8
8 x 2 = 16
8 x 5 = 40
8 x 10 = 80
8 x 12 = 96

2. Use the multiplication facts to continue the sequences of common multiples.

Key Facts
9 x 1 = 9
9 x 2 = 18
9 x 5 = 45
9 x 10 = 90
9 x 12 = 108

9 and 12: 36 ☐ ☐ ☐

Key Facts
4 x 1 = 4
4 x 2 = 8
4 x 5 = 20
4 x 10 = 40
4 x 12 = 48

Key Facts
12 x 1 = 12
12 x 2 = 24
12 x 5 = 60
12 x 10 = 120
12 x 12 = 144

4 and 7: 28 ☐ ☐ ☐

Key Facts
7 x 1 = 7
7 x 2 = 14
7 x 5 = 35
7 x 10 = 70
7 x 12 = 84

3. Which pair of numbers below cannot be matched to a common multiple?

Key Facts
5 x 1 = 5
5 x 2 = 10
5 x 5 = 25
5 x 10 = 50
5 x 12 = 60

4 and 11 **5 and 6** **7 and 9**

126 **132**

Key Facts
11 x 1 = 11
11 x 2 = 22
11 x 5 = 55
11 x 10 = 110
11 x 12 = 132

Explain your answer.

Thursday – Order of Operations

1. Match the calculation to the correct answer.

A. 10 x (16 – 4)	35
B. 12 x 9 – 18	120
C. 45 ÷ 9 x 7	90

2. Find the missing number.

12 + 36 ÷ ☐ = 18

3. Write the letter of the calculation that gives the following answer.

130

A. 12 x 7 + 9 x 2

B. 9 x 11 + 10

C. (8 + 4) x 11 – 2

D. 12 x (12 – 4) + 2

Letter ☐

4. Add brackets to each calculation to make them correct.

A. 12 + 14 ÷ 2 = 13

B. 11 x 12 – 5 = 77

C. 9 ÷ 3 x 22 – 12 = 30

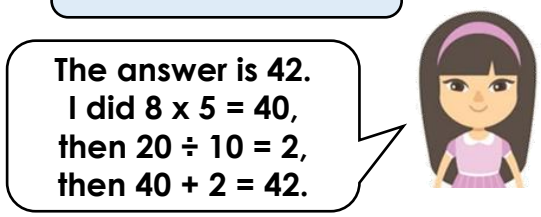
5. Use the following numbers to create a calculation with the answers below.

12 4 3

Answer	Calculations
84	
144	

6. Lucy is completing this calculation:

8 x 5 + 20 ÷ 10



Is she correct? Explain how you know.

7. Work out which child has which calculation from their given answers.

A. 4 + 8 x (3 + 7)

B. 4 + 8 x 3 + 7