

[Type here]

Maths Week 4

1. Explore 1 million:
 - Write 1 million in digits.
 - Write down the number that is 1 more than 1 million.
 - Write down the number that is 10 more than 1 million.
 - Write down the number that is 100 more than 1 million.
2. In June 2014 the population of the UK was approximately 64 100 000.

Round this number to the nearest million.

3. What can we say about 48 000?

It is less than 50 000.

It is made of 40 000 and together.

It is made of thousands.

It is made of hundreds.

It is made of tens.

4. Using all of the digits from 0 to 9, write down a 10-digit number.

What is the largest number you can write?

What is the smallest number you can write?

Write down the number that is one less than the largest number.

Write down the number that is one more than the smallest number.

Captain Conjecture says, 'Using the digits 0 to 9 we can write any number, no matter how large or small.'

Do you agree?

Explain your reasoning.

5. The temperature at 6 a.m. was recorded each day for one week.

| Day | Mon | Tues | Wed | Thurs | Fri | Sat | Sun |
|-----------|-----|------|-----|-------|-----|-----|-----|
| Temp (°C) | 1 | -1 | 0 | 3 | 2 | -2 | -3 |

What was the coldest morning?

What was the warmest morning?

What is the difference in temperature between Monday and Tuesday?

Place the recorded temperatures in order from smallest to largest.

[Type here]

6. Set out and solve these calculations using a column method.

$$3254 + \boxed{} = 7999$$

$$2431 = \boxed{} - 3456$$

$$6373 - \boxed{} = 3581$$

$$6719 = \boxed{} - 4562$$

7. True or False?

■ $3999 - 2999 = 4000 - 3000$

■ $3999 - 2999 = 3000 - 2000$

■ $2741 - 1263 = 2742 - 1264$

■ $2741 + 1263 = 2742 + 1264$

■ $2741 - 1263 = 2731 - 1253$

■ $2741 - 1263 = 2742 - 1252$

Explain your reasoning.

Using this number statement, $5222 - 3111 = 5223 - 3112$ write three more pairs of equivalent calculations.

8. Captain Conjecture says, 'When working with whole numbers, if you add two 2-digit numbers together the answer cannot be a 4-digit number.'

Do you agree?

Explain your reasoning.

9. a) Nigel had three halves of chocolate bars. How many full chocolate bars can he make?

b) Sarah had one third of her birthday cake left. Billy had one sixth of the cake. How much did they have altogether?

- c) Which denominator would you use to add together one eighth, one quarter and one half?

[Type here]

Column Multiplication Practice

Remember to use the expanded method and show all your working out. This means you can go back through and check each step. Pull into estimation station (choo choo!) for each question first. Take your time, each multiplication is super important.

$$\begin{array}{r} 1. \quad 7,519 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 6,642 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 6,290 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 9,512 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 3,613 \\ \times \quad 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 8,726 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 4,957 \\ \times \quad 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 7,902 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 6,237 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 9,847 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 867 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 1,907 \\ \times \quad 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 9,584 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 8,506 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 8,436 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 456 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 1,861 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 4,075 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 19. \quad 7,684 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 20. \quad 7,129 \\ \times \quad 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 21. \quad 9,917 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 22. \quad 6,529 \\ \times \quad 3 \\ \hline \\ \hline \end{array}$$

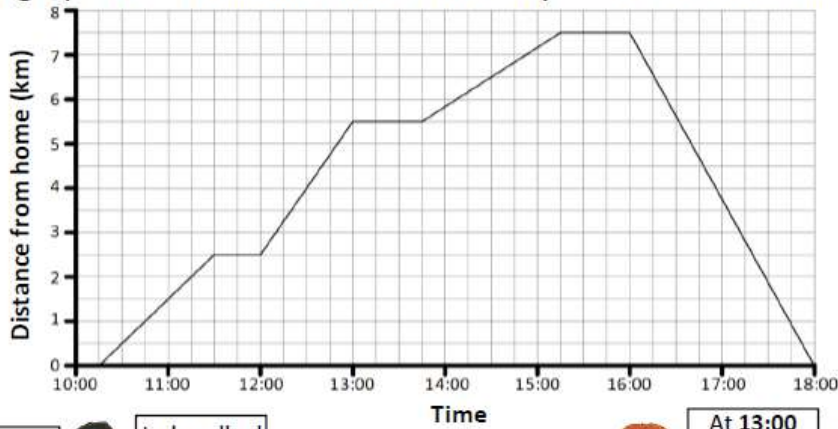
$$\begin{array}{r} 23. \quad 6,593 \\ \times \quad 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 24. \quad 4,266 \\ \times \quad 5 \\ \hline \\ \hline \end{array}$$

[Type here]

Statistics

This graph shows the distance walked by Jack on a weekend hike...



Mariam: By 14:30 Jack had walked 6 kilometres

Omar: Jack walked 14 kilometres in total

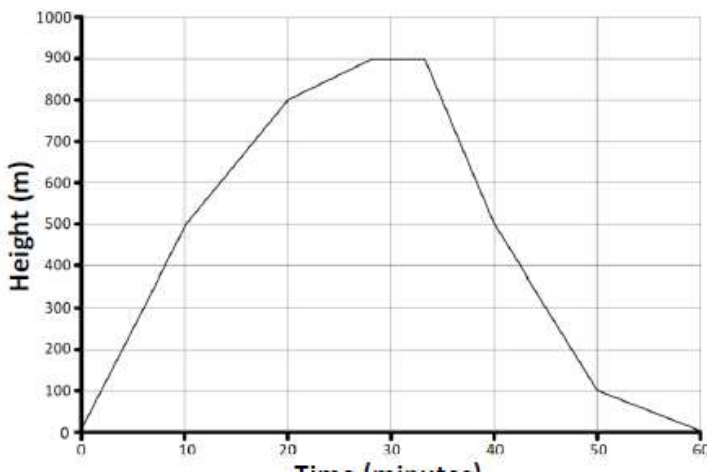
Danny: Jack left home at 10:15 and walked for $1\frac{1}{2}$ hours before stopping for a $\frac{1}{2}$ hour break

Jill: At 13:00 Jack stopped for 40 minutes to have his lunch

Ben: Jack was walking for $7\frac{3}{4}$ hours

ALL of the children have made mistakes in their statements. What mistakes have they made? Explain your reasoning...

Jill released a helium balloon. This graph shows its height over time...



Estimate...

- 1) The height of the balloon after 15 minutes
- 2) The two times the balloon was at a height of 400 metres
- 3) How long the balloon was at a height of 900 metres
- 4) How long it took the balloon to fall from 900m to the ground

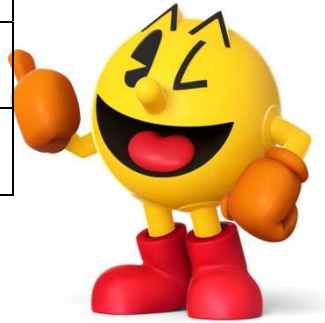


[Type here]

Two Way Tables

1) A group of Mums and Dads were asked about some old arcade games and which they preferred. Please complete the following two way table.

| | Pac Man | Space Invaders | Total |
|-------|---------|----------------|-------|
| Mums | 10 | | |
| Dads | | 15 | 27 |
| Total | | 33 | |



2) A class of children were asked about some popular apps and which they preferred. Please complete the following two way table.



| | Angry Birds | Candy Crush | Total |
|-------|-------------|-------------|-------|
| Boys | | 15 | 20 |
| Girls | 12 | | |
| Total | | | 40 |



[Type here]



3. A Class of children were asked about some films. Please complete the two way table below.

| | Zootropolis | Angry Birds the Movie | The Jungle Book | Total |
|--------------------|-------------|-----------------------|-----------------|-------|
| Seen | | | 6 | |
| Want to See | 7 | | 10 | 23 |
| Do Not want to see | 4 | 6 | | 14 |
| Total | 20 | 20 | | |



4. A group of pupils were asked whether they liked the following animated movie characters, they could answer either OK, Like or Amazing. Please complete the following table below.

| | Sully | Shrek | Minions | Total |
|---------|-------|-------|---------|-------|
| Amazing | 14 | | 17 | |
| Like | | 12 | | 25 |
| OK | 4 | | 4 | 10 |
| Total | | 26 | 26 | 78 |

