



Year 4

Remote Learning

Maths Week 16 Statistics – ANSWERS!

Lesson One

$$3 \times 0.2 = 0.6$$

$$5 \times 0.1 = 0.5$$

$$0.3 \times 12 = 3.6$$

$$0.7 \times 8 = 5.6$$

$$6 \times 0.3 = 1.8$$

$$4 \times 0.2 = 0.8$$

$$8 \times 0.2 = 1.6$$

$$12 \times 0.7 = 8.4$$

$$9 \times 0.9 = 8.1$$

$$11 \times 0.4 = 4.4$$

$$9 \times 0.7 = 6.3$$

$$12 \times 1.2 = 14.4$$

European bar chart questions

1: What was the difference between the temperature in Paris and Dublin? = **3 degrees.**

2: What was the range of temperatures from the lowest to the highest? = **5 degrees**

3: What is the average temperature? Add up all the six temperatures and the divide them by 6. = **25 degrees**

4: Madrid's temperature was measured as one and a half times as hot as London. What was its temperature? = **39 degrees.**

5: The next year, Dublin's highest recorded temperature dropped by 14 degrees. What would it be? = **9 degrees**

Crouch End temperature questions

6: On Day 10, the temperature rises by another 7 degrees, what would it be? = **22 degrees.**

7: From Day 3 onwards, how much has the temperature risen to day 9? = **6 degrees**

8: On what day did the temperature neither fall nor rise? = **Day 6**

9: If the temperature on Day 12 is 27 degrees, how much would it have changed from Day 9? = **12 degrees**

10: On what day saw the biggest change in temperature? = **Day 8 (3 degrees change from day 7)**

Lesson 2: Quick Questions

Quick fire Near Doubles

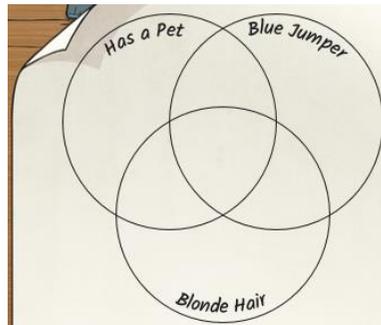
Here are twenty questions which are almost doubling but not quite, how will you solve them?

- $4 + 3 = 8$
- $11 + 12 = 23$
- $13 + 15 = 28$
- $21 + 22 = 43$
- $31 + 29 = 60$
- $43 + 45 = 88$
- $19 + 22 = 41$
- $51 + 48 = 99$
- $61 + 59 = 120$
- $23 + 24 = 47$
- $35 + 34 = 69$
- $98 + 102 = 200$
- $198 + 203 = 401$
- $73 + 69 = 132$
- $297 + 301 = 598$
- $103 + 105 = 208$
- $402 + 397 = 799$
- $3002 + 2998 = 6000$
- $1.1 + 1.2 = 2.3$
- $1.8 + 2.1 = 3.9$

Main Activity

| Name | Any Pets? | Colour of Jumper | Colour of Hair |
|---------|-----------|------------------|----------------|
| Eli | yes | red | black |
| Dara | yes | red | brown |
| Kaylee | yes | red | blonde |
| Poppy | yes | blue | blonde |
| Klaudia | yes | blue | auburn |
| Lowri | no | blue | brown |

Here is some information on a group of children in a class. Can you put the children's names in this Venn diagram? Draw it out on paper.

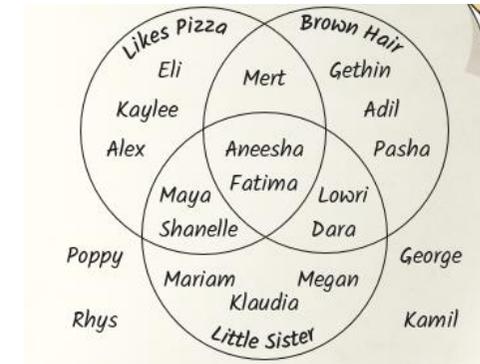


Next, draw a Carroll diagram to place these names inside. Here is a Carroll diagram with the titles already in place with one name already in the right place:

| | | |
|-----------|-------------------|-----------------------------|
| | Has a blue jumper | Does not have a blue jumper |
| Has pets? | | Eli |
| No pets | | |

Have a look at this Venn diagram.

There are 3 categories that 19 children have been sorted into: Likes pizza, has brown hair and has a little sister. Your task is to take this data and put it into a table of results.



Your table will have the names of the children in a column on the left. You will then have a column each for the three categories.

Here is an example of one completed row.

| Name | Likes Pizza | Has brown hair | Has a little sister |
|----------|-------------|----------------|---------------------|
| Mr Shiel | Yes | Yes | No |

Use squared paper to draw out the table. Try to be precise when you draw the lines for rows and columns. Using a ruler will help!

Lesson 3 – Quick Questions

Have a look at this table of Roman Numerals:

| Roman Numerals | | | |
|--------------------------------------|----|------|-------|
| Can you count by only using letters? | | | |
| I | 1 | XXX | 30 |
| II | 2 | XL | 40 |
| III | 3 | L | 50 |
| IV | 4 | LX | 60 |
| V | 5 | LXX | 70 |
| VI | 6 | LXXX | 80 |
| VII | 7 | XC | 90 |
| VIII | 8 | C | 100 |
| IX | 9 | D | 500 |
| X | 10 | M | 1,000 |
| XX | 20 | MD | 1,500 |

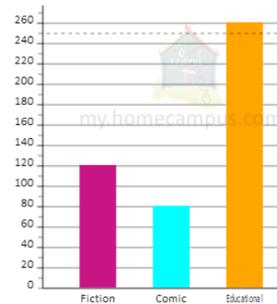
What are these numbers:

- | | | |
|-----------|-------|------|
| 1. MD | _____ | 1500 |
| 2. MCD | _____ | 1400 |
| 3. XXXIV | _____ | 34 |
| 4. CXVI | _____ | 116 |
| 5. DCLX | _____ | 660 |
| 6. CXIII | _____ | 113 |
| CD + DC = | _____ | 1000 |
| VI + IV = | _____ | 10 |
| XI + IX = | _____ | 20 |

A Sock to the System!

How many socks are in your house? You probably have some for yourself, your family and carers might even have some socks they like to wear. But how many are there in your home and how would you classify them? Plain colours? Stripey? Odd? Smelly?

Now is the time to analyse your family socks and make some graphs.



First off, let's make a **bar chart** of how many socks people in your family have. Count the socks that belong to people in your home and then call up other people and find out how many socks they have. Add Mr Shiel into your chart – he has 14 pairs of socks!

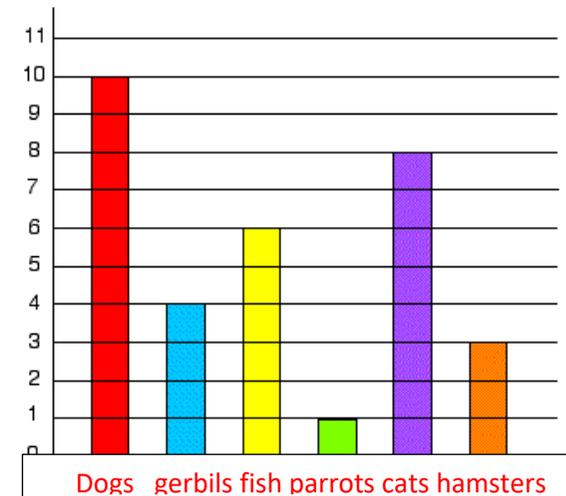
Now let's analyse your own socks. How would you classify them? Create a frequency chart which details the types of socks you might have. Below is an example few rows from Mr Shiel's sock collection.

| | |
|-----------|------|
| Plain Red | II |
| Holey | IIII |
| Patterned | II |
| Odd | I |

How will you classify your socks?

The Pet Graph

Tim's class collected information about all their pets. They have six different kinds of pets between them. This is the block graph they are making to show how many of each pet the class has altogether.



The children have not yet put in the animal names under each column. Can you do this for them using the information below?

There are two less cats than dogs.
 Only one child has a parrot at home.
 The number of fish added to the number of gerbils is equal to the number of dogs.
 There are twice as many fish as hamsters.
 There are half the number of gerbils as there are cats.

Lesson Four – Quick Questions

Here are some quick arithmetic questions to get your brain going.

$$301 + 100 = 401$$
$$456 - 200 = 656$$
$$2009 - 1010 = 999$$

$$43 \times 2 = 86$$
$$25 \times 3 = 75$$
$$41 \times 4 = 164$$

$$96 \div 8 = 12$$
$$660 \div 3 = 220$$
$$84 \div 4 = 21$$

$$6.2 + 4.8 = 11$$
$$5.3 - 3.2 = 2.1$$
$$7.9 - 4.7 = 3.2$$

$$12 \times 2 \times 2 = 48$$
$$7 \times 2 \times 4 = 56$$
$$8 \times 3 \times 4 = 96$$

Main Activity

Today we are reading timetables and answering questions based on those timetables. Here is a bus timetable.

| | | | |
|---------------|------|------|------|
| Mill Road | 0726 | | 0842 |
| High Street | 0729 | 0803 | |
| Pitsmoor Road | 0759 | 0833 | |
| Fulwood | 0845 | 0919 | 0946 |

1: If I get on the bus at Mill Road at 07:26am, what time will I get to Fulwood? = **08:45**

2: If I arrive at Fulwood at 09:19am, what time did I get on the bus from High street? **08:03**

3: How long is the journey from Pitsmoor road to Fulwood? = **46 minutes**

4: It takes me 15 minutes to walk from my home to the bus stop on the Highroad. What time is the latest I can leave home to get to the bus stop for the 8:03am bus? = **7:48am**

5: How long is the journey from Mill road all the way to Fulwood on the earliest bus? = **1 hour and 19 minutes**

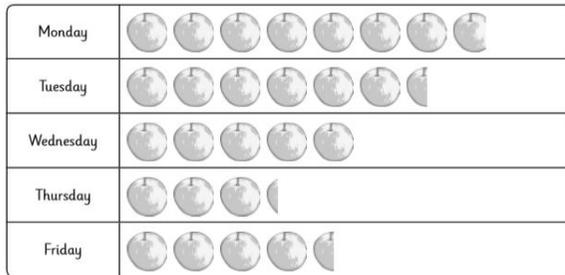
6: The express service from Mill road at 8:42am is much quicker as it has fewer stops. How much quicker is it than the first bus on the timetable? = **15 minutes faster**

- 12:53
- 19:48
- Journey A = 3 hours and 49 minutes
Journey A = 2 hours and 57 minutes
Difference in time = 52 minutes
- Journey A or B
Journey A = 1 hour and 14 minutes
Journey B = 32 minutes
- 1 hour and 37 minutes
- 2 stations
-

| Destination | Journey D | Journey E | Journey F |
|-------------|------------------------|------------------------|-----------------------|
| London | 21:52 | 23:12 | 04:18 |
| Derby | 23:47 | 00:28 | 05:43 |
| Sheffield | 00:13 | 00:43 | 06:02 |
| York | 00:51 | 01:33 | 06:49 |
| Newcastle | 01:41 | 02:09 | 07:23 |
| Duration | 3 hours and 49 minutes | 2 hours and 57 minutes | 3 hours and 5 minutes |

Lesson Five – Assessment Questions

Here is a pictogram showing how many apples were sold by a fruit shop in a week. 1 Picture of an Apple represents 4 apples sold.



 = 4 apples

1: How many Apples were sold on Tuesday? = **26**

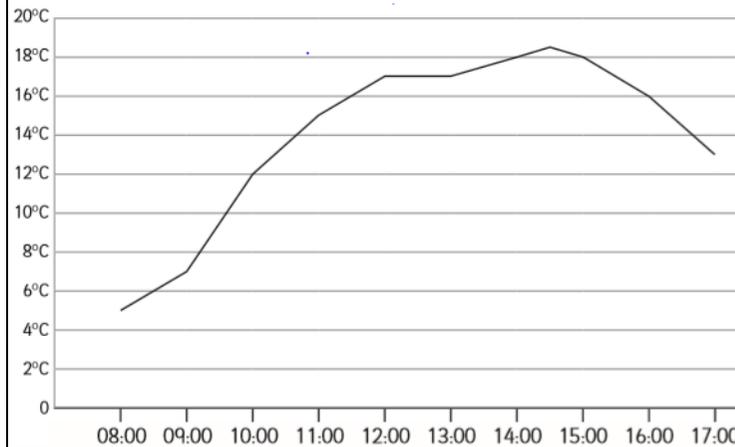
2: True or False? More apples were sold on Monday and Tuesday than the rest of the week combined. = **True**

3: True or False? The difference between Thursday and Friday is 6 apples. = **False**

4: What is the total amount of Apples sold in this week? = **108**

5: The following week the fruit shop manages to double the amount of fruit sold in the previous week. If you combine those amounts, how much is that in 2 weeks? = **324**

Lesson Five – Assessment Questions This line graph shows the temperature of the playground at school on a single day.



A: At what time was the temperature 10 degrees? = **Between 9:30-9:50am**

B: Between what times did the temperature remain the same? = **12:00pm -13:00pm**

C: What was the temperature at 15:30? = **17 degrees**

D: What was the temperature at 8:00am = **5 degrees**

E: What was the temperature difference between 8:00am and 15:30am? = **12 degrees**

Lesson Five – Assessment questions

| | Boys | Girls | Total |
|------------|----------|----------|-----------|
| Vanilla | 2 | 9 | 11 |
| Strawberry | 10 | 7 | 17 |
| Chocolate | 4 | 2 | 6 |
| Mint | 2 | 9 | 11 |
| Toffee | 4 | 1 | 5 |
| Total | 22 | 28 | 50 |

Here is a chart of Year 4 children's favourite ice cream flavours. Using the information available, fill out the rest of the chart.

Once you have completed the table, try to answer these questions:

A: Is it true that more people like Chocolate and Strawberry than the rest of the flavours combined? = **False (the other flavours = 27)**

B: What is the range from the smallest amount to the largest amount? = **12**

C: When they ran this survey with Year 5, twice as many children said Chocolate. When they ran this survey with year 6, 4 more children than Year 4 said Chocolate. How many children in Years 4, 5 and 6 said Chocolate was their favourite? = **64**