## $\underline{\text { Lewis Class }}$

## Year 4 Maths (week beginning 01.06.20)

Here are some links to websites that have videos to support your child's learning in Maths. If you are struggling to find time to sit down with them, they could watch and make notes independently. These are not necessarily linked to the current topic but are still useful tools for learning. They can also be used as additional learning if needed.
https://www.bbc.co.uk/bitesize/subjects/z826n39
https://www.thenational.academy/online-classroom/year-4/maths\#subjects

## Statistics

## Task 1

- Revisit pictograms and bar charts


## Pictograms

A pictogram is a chart that uses pictures to represent data. The pictures are used as symbols which have a value.
Remember to look for what each picture (symbol) is worth and if there is half of a picture, you need to halve the value.
Here is an example:


Watch this video about understanding pictograms https://www.bbc.co.uk/programmes/p017ksvf

## Bar charts

A bar chart is a way of displaying information (data) by using rectangular bars of different heights. A bar chart has vertical axis with numbers on it, and a horizontal axis showing values of something that has been investigated.
Here is an example:
This bar chart shows how many children attend after school clubs:


Watch this video on understanding bar charts https://plprimarystars.com/resources/handling-data-in-football\#m-resource-1032-link

Create an information sheet/poster to explain pictograms and bar charts which you will be able to use as a revision aid later in the week.

## Task 2

- Interpreting charts

Watch this video on how to interpret a bar chart https://www.bbc.co.uk/bitesize/clips/z28jxnb

Now that you have revisited your knowledge about charts, have a go at these:
For this bar chart question, you need to look at the bars and see what number on the vertical axis they go up to.
Copy the table and complete using the data in this bar chart:


| Transport | Number of children |
| :---: | :---: |
| Car |  |
| Walk |  |
| Bus |  |
| Bicycle |  |

Answer these questions in your book:

1. What was the most/least popular way to get to school?
2. How many children walk to school?
3. How many more children walk to school than travel by bus?
4. How many children in total travelled by car and bus?

## Represent this data in a bar chart:

You need to consider what scale will be the most appropriate for your bar chart (the numbers that will go on the vertical axis). For this bar chart I would suggest going up in 10s. Use this example as a guide if you are finding it tricky - ensure you space the numbers out equally.

Watch this video on how to create a bar chart
https://www.youtube.com/watch?v=oYXmY5axC21

| Day | Number of tickets sold |
| :---: | :---: |
| Monday | 55 |
| Tuesday | 30 |
| Wednesday | 45 |
| Thursday | 75 |
| Friday | 85 |

Remember your bars must be evenly spaced out and should NOT be touching.

## Number of tickets sold



## Task 3

- Interpreting charts

The pictogram shows the number of ice creams sold in a shop.

\left.| Ice cream flavour | Number of ice creams sold |  |  |
| :---: | :---: | :---: | :---: |
| vanilla | 3 | 8 |  |$\right)$

Answer these questions in your book:

1. How many ice creams were sold in total?
2. Which was the most popular flavour of ice cream?
3. How many vanilla ice creams were sold?

What other questions could you ask about this data?

Key $\bar{\eta}=2$ ice creams

Collect data about people in your household's favourite ice cream flavour and create a pictogram to represent it. What other data could you collect and how could you represent it. Could you represent the same data in different ways? Is one way better that at another at representing the data?

## Task 4

- Comparison, sum and difference

Use your knowledge of addition and subtraction to answer questions accurately and begin to ask your own questions about data in pictograms, bar charts and tables.


How many more points does the Sycamore team have than the Ash team?

## Remember to look at the Key to see the value of each circle!

Now write 3 more questions about the data in this pictogram.
Write these questions in your exercise book and answer them correctly.

| Activity | Number of votes |
| :---: | :---: |
| Bowling | 9 |
| Cinema | 10 |
| Swimming | 7 |
| Ice-skating | 14 |

## How many people voted in total?

$\frac{1}{4}$ of the votes were for $\qquad$ -
7 more people voted for $\qquad$ than $\qquad$ _

The pictogram shows the points scored in a game by five teams.

| Team | Points |
| :---: | :--- |
| Red | $\square \square \square \square \square$ |
| Blue | $\square \square \square$ |
| Green | $\square \square \square \square$ |
| Yellow | $\square$ |
| Pink | $\square \square \square \square$ |

Key $\square=4$ points

Symbols:
< means less than
> means greater than = means equal to
a) Write $<,>$ or $=$ to compare the points scored by the teams.
 Blue and Green Red and Green
 Yellow and Blue Red and Blue
 Green and Yellow Blue and Green $\square$ Yellow

## Task 5

- Problem solving and reasoning

For each of these questions, write your answer in your exercise book.

Halifax City Football Club sold the following number of season tickets:

- Male adults - 6,382
- Female adults $-5,850$
- Boys - 3,209
- Girls - 5,057

Would you use a bar chart, table or pictogram to represent this data? Explain why.


Rosie says,


Can you spot Rosie's mistake? How many people were asked altogether?

Alex wants to use a pictogram to represent the favourite drinks of everyone in her class.


Explain why this is not a good idea.

| Attraction | Number of visitors on <br> Saturday | Number of visitors on <br> Sunday |
| :---: | :---: | :---: |
| Animal World Zoo | 1,282 | 2,564 |
| Maltings Castle | 2,045 | 1,820 |
| Primrose Park | 1,952 | 1,325 |
| Film Land Cinema | 2,054 | 1,595 |

## True or false?

- The same number of people visited Maltings Castle as Film Land Cinema on Saturday.
- Double the number of people visited Animal World Zoo on Sunday than Saturday.
- The least popular attraction of the weekend was Primrose Park.


## Throughout the week - practise multiplication tables:

You could:

- Focus on whichever one you find difficult to remember and write out in a random order to improve your rapid recall.
- Play on Hit the Button - focus on number bonds, halves, doubles and times tables -
https://www.topmarks.co.uk/maths-games/hit-the-button
Do a multiplication dance - https://www.bbc.co.uk/teach/supermovers/times-table-collection/z4vv6v4

