## Maths

Statistics

Session 1- Recap, look at a pictogram we made together last week. What can you remember?

## Here is your completed pictogram

Number of mini beasts on Spring walk

| Mini beast | Number on Spring walk |
| :---: | :---: |
| Butterfly | -昗 jé |
| Ladybird |  |
| Worm | $\pi_{0}^{\infty}$ |
| Spider |  |

Remember, that if the key is not 1, you may need to represent the picture differently.

For example, the key here is that each picture represents 2.

There were 3 worms on the walk. Therefore the worm has been cut in half to show it represent 1.

Key
$=$ two mini beasts

Number of mini beasts on Spring walk

| Mini beast | Number on Spring walk |
| :---: | :---: |
| Butterfly |  |
| Ladybird |  |
| Worm | $e^{\infty}$ |
| Spider |  |

How many butterflies were there on the mini beast walk?

How many spiders?
How many worms?

Key
$=$ two mini beasts

## Task

As a class, look at the following questions. Use your whiteboard to see if you can work out the answers.

Dora, Dexter and Jack play basketball at break time.

They record the goals they score in a pictogram.

| Name | Goals |
| :---: | :---: |
| Dora | Key <br> Keals |
| Dexter |  |
| Jack |  |

a) Complete the sentences.


Dora, Dexter and Jack play basketball at break time.

They record the goals they score in a pictogram.

| Name | Goals |
| :---: | :---: |
| Dora | Key <br> Koals <br> Dexter |
| Jack |  |

b) How many goals do they score altogether?

c) How many more goals does Jack score than Dexter?

d) How many ways could you work out the answer to part c)?

Two classes go on a trip to the zoo together.
There are two coaches to take both classes.

|  | Coach 1 |  | Coach 2 |
| :---: | :---: | :---: | :---: |
| Boys | $\because$ © | Boys | ( $)$ ( $\because$ |
| Girls | $\because$ © $\because$ | Girls | $\because \odot \bigcirc$ |

Tick the correct answer.
$\Theta=10$ children
a) Which coach has more boys?

Coach 1 Coach 2 They have the same

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|  | Coach 1 |  | Coach 2 |
| :---: | :---: | :---: | :---: |
| Boys | $\because \because$ | Boys | ( $\because$ |
| Girls | $\because \because$ | Girls | $\because \odot \bigcirc$ |

Key
$\because=10$ children
b) Which coach has more girls?

Coach 1 Coach 2 They have the same
c) How many girls are there in total?
d) How many more girls than boys are there on Coach 2?
e) How many more girls than boys are there on the trip to the zoo?


At the zoo, Mo keeps a record of how many big cats he sees.

| Big Cat |  | $\begin{gathered} \text { Key } \\ \hat{j}_{j}=2 \text { big cats } \end{gathered}$ |
| :---: | :---: | :---: |
| Leopard | dij ${ }_{j}^{0}$ |  |
| Cheetah |  |  |
| Lion | 90\% |  |
| Tiger |  |  |

a) Choose a word to complete the sentence.

fewer

There are $\qquad$ leopards than lions.

There are $\qquad$ lions than cheetahs.

At the zoo, Mo keeps a record of how many big cats he sees.

| Big Cat |  | $\begin{gathered} \text { Key } \\ 2 \text { big cats } \end{gathered}$ |
| :---: | :---: | :---: |
| Leopard | aj \% jom |  |
| Cheetah | \% ${ }_{0}$ |  |
| Lion | -0\% $0^{0}$ |  |
| Tiger |  |  |

b)


Is Rosie correct? $\qquad$
How do you know?

At the zoo, Mo keeps a record of how many big cats he sees.

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| :---: | :---: | :---: |
| Leopard |  |  |
| Cheetah | \% $0_{0}$ |  |
| Lion | -0\% $0_{0}^{0}$ |  |
| Tiger |  |  |



## Session Two

Today we are looking at block charts. They are similar to bar graphs if you have seen them before. Here is an example of a block chart.


## Block Charts

## A block chart is a collection of data that is represented in blocks.

A block chart needs:

- A title, explaining what it shows
- Axis with a clear scale with equal intervals
- Blocks to represent the data
- No gap between the bars
- Each bar must be the same width.


## Session 2



## Session 2



## Session 2



The block is in between 2 and 4 so therefore 3 children's favourite activity is swimming

## Look at the chart

Class A's favourite colours

| Colour | Total <br> number of <br> children |
| :---: | :---: |
| Blue | 6 |
| Pink | 3 |
| Green | 8 |
| Yellow | 11 |
| Other | 2 |



Colour
Step One: Look at the total number.
Step Two: Make sure you are looking at the correct block.
Step Three: Look at where you need the colour the blocks until.
Step Four: Colour the blocks

## Look at the tally chart

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## Look at the tally chart

Class A's favourite colours


| Colour |
| :--- |
| Blue |
| Pink |
| Green |
| Yumber of |
| children | \left\lvert\, | 6 |  |
| :---: | :---: |
| Yellow | 11 |
| Other | 2 | | Step One: Look at the total |
| :--- |
| number. |
| Step Two: Make sure you <br> are looking at the correct <br> block. |
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## Session 2- Task

Class A shared some of their favourite things. Choose a table and create a block chart representing the data.

Task A
Task B
Task C

| Colour | Total |
| :---: | :---: |
| Blue | 5 |
| Pink | 7 |
| Orange | 2 |
| Red | 3 |
| Other | 4 |


| Sport | Total |
| :---: | :---: |
| Netball | 10 |
| Football | 15 |
| Swimming | 3 |
| Hockey | 16 |
| Gymnastics | 6 |


| Hobby | Total |
| :---: | :---: |
| Playing Sport | 12 |
| Jigsaws | 26 |
| Reading | 15 |
| Yoga | 7 |
| Colouring | 10 |

## Block Diagrams

Class A went to the farm. They recorded how

many farm animals they saw, using a block diagram.


Animals
Complete the table to show how many of each animal they saw.

Which was the most common animal?
How many more chickens than goats were there?
How many fewer cows than sheep were there?
Write a title for this block diagram.

## Block Diagrams

Class B carried out a survey about after-school activities in their school. They recorded the data in this block diagram.


Amna and Bill are looking at the block diagram.


Do you agree with Amna and Bill?

Swimming is twice as popular as art.

True or false? Class A saw 32 farm animals in total.

Frankie makes a tally chart of the animals he saw at the zoo

| Animals at the zoo | Telly |
| :---: | :---: |
| 4 | HH |
| $\cos ^{2}$ | 1111 |
|  | 11 |
| $\frac{5}{4}$ | HITIII |

Tick one box below that shows all of the amimalls Frankie saw and explain why the others are incorrect.


## Session 3

## Today we will be interpreting block graphs.

Can you remember what you need to include in a block graph?

## Block Charts

## A block chart is a collection of data that is represented in blocks.

A block chart needs:

- A title, explaining what it shows
- Axis with a clear scale with equal intervals
- Blocks to represent the data
- No gap between the bars
- Each bar must be the same width.


## Session Three



## Session Three



## Session Three



The block is in between 2 and 4 so therefore 3 children's favourite activity is swimming

Here is a block diagram of Class 2's favourite colour

| 14 |  |  |  |
| ---: | :--- | :--- | :--- |
| 13 |  |  |  |
| 12 |  |  |  |
| 11 |  |  |  |
| 10 |  |  |  |
| 9 |  |  |  |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  |  |
| 3 |  |  |  |
| 2 |  |  |  |
| 1 |  |  |  |
|  | $\frac{0}{\mathbf{0}}$ | $\frac{3}{3}$ |  |

## What can you tell your partner about the information on the block chart?

Here is a block diagram of Class 2's favourite colour


## Now think about the following questions and think about how you know the answer.

Here is a block diagram of Class 2's favourite colour

| 14 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 13 |  |  |  |  |
| 12 |  |  |  |  |
| 11 |  |  |  |  |
| 10 |  |  |  |  |
| 9 |  |  |  |  |
| 8 |  |  |  |  |
| 7 |  |  |  |  |
| 6 |  |  |  |  |
| 5 |  |  |  |  |
| 4 |  |  |  |  |
| 3 |  |  |  |  |
| 2 |  |  |  |  |
| 1 |  |  |  |  |
|  | $\frac{\text { S }}{\text { ¢ }}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 勇 | $\frac{\text { 䍒 }}{\bar{\omega}}$ |

What does this
word mean?


Which colour is the most popular?

How many people chose blue as their favourite colour?

Which colour is least popular?

Here is a block diagram of Class 2's favourite colour

| 14 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 13 |  |  |  |  |
| 12 |  |  |  |  |
| 11 |  |  |  |  |
| 10 |  |  |  |  |
| 9 |  |  |  |  |
| 8 |  |  |  |  |
| 7 |  |  |  |  |
| 6 |  |  |  |  |
| 5 |  |  |  |  |
| 4 |  |  |  |  |
| 3 |  |  |  |  |
| 2 |  |  |  |  |
| 1 |  |  |  |  |
|  | $\frac{\text { S }}{\frac{2}{9}}$ | $\begin{aligned} & \text { O } \\ & \text { 吕 } \end{aligned}$ | 蛋 | $\frac{\mathrm{om}}{\overline{\mathrm{o}}}$ |

How can you work out the answers to these questions?

How many more people like yellow than orange?

How many more people like yellow than red?

## Now look at the following block chart.

Animals at the zoo


What is different about this block chart?

## Now look at the following block chart.

Animals at the zoo


How many meerkats are at the zoo?

How many zebras are there at the zoo?

How many more elephants are there than monkeys?

## Session 3 Task

Task A

Use the block graph to draw the correct number of animals in each enclosure


Task B

Use the block graph to answer the questions in your book.


At the zoo, Mo keeps a record of how many big cats he sees.


Dora has tried to show the same information on a block diagram but she has made a mistake.
a) What mistake has Dora made?


