



BRONZE

School name: _____ **MATHS PLANNING YEAR A**



Teacher: _____

Class: _____

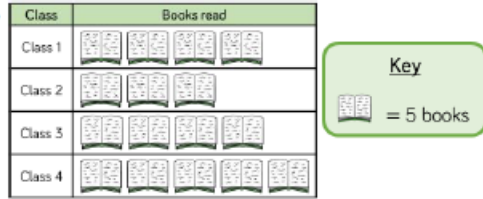
Year: 3-4

Term: Summer 2

Week Commencing: Week 1

Topic		NC Links: Pupils should be taught to:						
		Statistics						
Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Mon	<u>L.O. 6x table</u> <u>L.O. fluency</u> 173 x 6 = 964 ÷ 6 = 5412 - 783 = 1785 + 555 =	TMM <u>L.O. To fill in a web</u>	<u>L.O. To interpret information in a pictogram.</u> Must: create a symbol Should: draw a pictogram Could: answer questions from the data.	Children build on their understanding of pictograms from Year 2. Teach chn to read and interpret information in order to answer questions about the data. It is important that children understand the value of each symbol used and what it means when half a symbol is used.	Children construct pictograms and choose an appropriate key. Encourage children to carry out their own data collection. Maths No Problem3B p60-64 Worksheet 1.	Pictogram Picture graph Statistics Data Symbol Whole half	Children explain their pictograms What is each symbol worth? What does half of the symbol represent? What other questions could you ask about the pictogram?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL

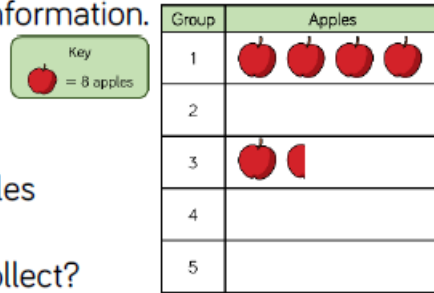
4 classes are recording how many books they read in a week. Here are the results of how many books they read last week.



- Which class read the most books?
- Which class read the least books?
- How many more books did Class 4 read than Class 2?

Complete the pictogram using the information.

- Group 2 collected 40 apples.
 - Group 4 collected half as many apples as Group 1
 - Group 5 collected 20 more apples than Group 3
- How many apples did each group collect?



Class 3 are counting the colour of cars that pass the school.

Red	Blue	Black	Silver	White	Other
12	6	14	10	14	2

Draw a pictogram to represent their findings.

Ron, Amir and Alex record the scores of six football matches. Unfortunately, Ron spilt paint on them.

Match	Number of goals = 2 goals
1	
2	
3	
4	
5	
6	

Record the results based on what the children remember.



Match 1 had 3 more goals than match 3

Match 6 had 1 less goal than match 2

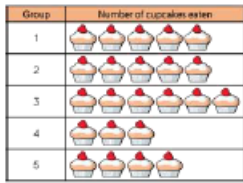


Match 4 had twice as many goals as match 3

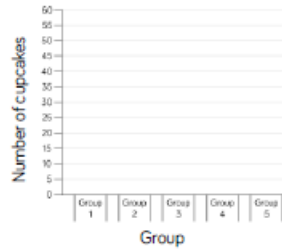


Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Tues	<u>L.O. 6x table</u> <u>L.O. fluency</u> 267 x 6 = 570 ÷ 6 = 7024 - 647 = 4702 + 388 =	TMM <u>L.O. To join the 6x facts</u>	<u>L.O. To construct a bar graph.</u> Must: construct a bar chart Should: decide on an appropriate scale Could: answer questions from the data.	Teach children to read and interpret information in pictograms and tally charts to construct a bar chart. They interpret the data to extract information to answer questions. Teach children to read and interpret bar charts with scales of 1, 2, 5 and 10. They decide which scale is most appropriate for their bar charts. Have some prepared bar charts to populate before chn move on to constructing their own. They will require some time and practise to do this. Construct the first as a class, step by step.	Chn populate pre drawn bar charts then draw bar charts from given data. Maths No Problem3B p65-68 Worksheet 2.	Pictogram Picture graph Statistics Data Difference Tally chart Bar chart Most Least	Which scale should you use? How do you decide? What's the same and what's different about the pictogram and the bar chart? How does the bar chart help you understand the information?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL

Use the information from the pictogram to complete the bar chart.

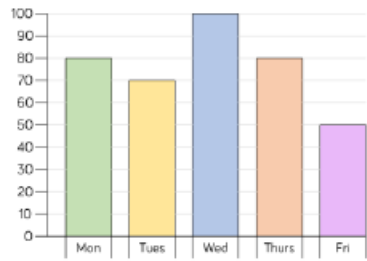


Key
 = 5 cupcakes



A bar chart to show the number of cupcakes eaten

The bar chart shows how many children attend after school clubs.



Which day is the most popular?
 Which day is the least popular?
 What is the difference between the number of children attending on Tuesday and on Thursday?
 What information is missing from the bar chart?

Here is a tally chart showing the number of children in each sports club.

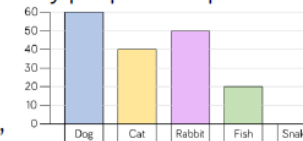
Draw a bar chart to represent the data.

Sport	Tally	Total
Football		15
Tennis		
Rugby		
Cricket		
Basketball		

Which would be more suitable to represent this information, a bar chart or a pictogram?
 Explain why.

Child	Number of Skips in 30 Seconds
Teddy	12
Annie	15
Whitney	17
Ron	8

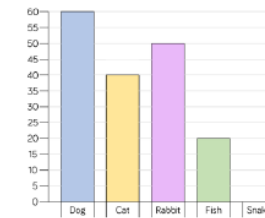
Rosie and Jack have drawn bar charts to show how many people have pets



Rosie says,



I asked more people because my scale goes up in larger jumps.



Jack says,

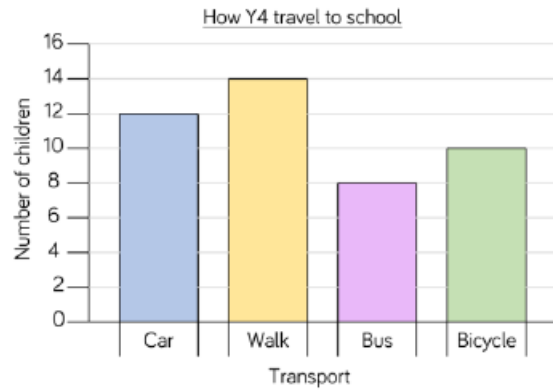


I asked more people because my bars are taller.

Who is correct? Explain why.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
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Wed	<u>L.O. 6x table</u> <u>L.O. fluency</u> 4848+ 3574= 700-247= 741x 6= 846÷6=	TMM <u>L.O. Solve a multiplication pyramid problem</u>	<u>L.O. To interpret bar graphs.</u> Must: read the bar graph Should: interpret the data correctly Could: draw conclusions from the data	Revisit how to use bar charts, pictograms and tables to interpret and present discrete data. Teach chn to decide which scale will be the most appropriate when drawing their own bar charts. Questions about the data they have gathered should also be explored so the focus is on interpreting rather than drawing. What scale will you use for your own bar chart? Why?	Children gather their own data using tally charts and then present the information in a bar chart. Suggestions could be pets, numbers in a family, favourite colour etc Maths No Problem 3B p69-72 Worksheet 3	Pictogram Picture graph Statistics Data Difference Tally chart Bar chart Most Least	What are the different ways to present data? What do you notice about the different axes? What do you notice about the scale of the bar chart? What else does the data tell us?	Exceeding ARE: At ARE: Below ARE: SEND PPG EAL

Complete the table using the information in the bar chart.



Transport	Number of children
Car	
Walk	
Bus	
Bicycle	

What is the most/least popular way to get to school?

How many children walk to school?

Represent the data in each table as a bar chart.

Team	Number of house points
Sycamore	
Oak	
Beech	
Ash	

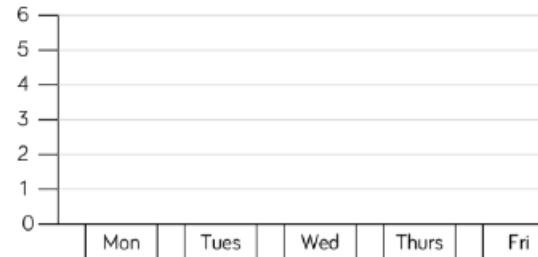
= 20 points

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

Here is some information about the number of tickets sold for a concert.

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

Jack starts to create a bar chart to represent the number of concert tickets sold during the week.



What advice would you give Jack about the scale he has chosen?

What would be a better scale to use?

Is there anything else missing from the bar chart?

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.

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Thurs	<p><u>L.O. 6x table</u></p> <p><u>L.O. fluency</u></p> <p>7745+1932= 700-294= 159x6= 846÷6=</p>	<p>TMM</p> <p><u>L.O. To tick or X and explain why some calculations are wrong</u></p>	<p><u>L.O. To solve comparison, sum and difference problems</u></p> <p>Must: compare data Should: find sum and difference Could: ask your own questions of the data</p>	<p>Teach chn to solve comparison, sum and difference problems using discrete data with a range of scales. They use addition and subtraction to answer questions accurately and ask their own questions about the data in pictograms, bar charts and tables. Although examples of data are given, children should have the opportunity to ask and answer questions relating to data they have collected themselves. What data could we collect as a class? What questions could we ask about the data?</p>	<p>Chn complete a table using data from a bar chart</p> <p>Show chn a set of data and ask whether a bar chart, a table or a pictogram would be best to represent it? Show chn data and a bar chart and ask them to comment on whether the scale is appropriate. Chn collect data and represent it.</p> <p>Maths No Problem3B p73-80 Worksheets 4-5.</p>	<p>Pictogram Picture graph Statistics Data Symbol Whole Half Tally chart Bar chart</p>	<p>What does a full circle represent in the pictogram? What does a half/quarter/three quarters of the circle represent? What other questions could we ask about the pictogram?</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

Team	Number of house points
Sycamore	
Oak	
Beech	
Ash	

= 20 points

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

How many points do Beech and Oak teams have altogether?

How many more points do Ash need to be equal to Oak?

As a class, decide on some data that you would like to collect, for example: favourite books, films, food.

Collect and record the data in a table.

Choose a pictogram or a bar chart to represent your data, giving reasons for your choices.

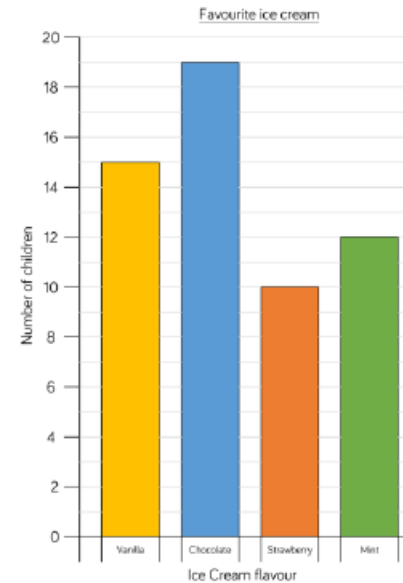
What questions can you ask about the data?

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 _____.

7 more people voted for _____ than _____.



Rosie says,



We asked 54 people altogether.

Can you spot Rosie's mistake?

How many people were asked altogether?

Day	Mental/Oral Starter		Main Lesson				Plenary	Assessment
	Objectives	Activity	Objectives	Teaching	Activities	Key Vocabulary	Activity	
Fri	<p><u>L.O.</u> <u>Times table test</u></p> <p><u>L.O. fluency</u></p> <p>2145+1732= 711-294= 177x7= 651÷7=</p>		<p><u>L.O. To use tables</u></p> <p>Must: read the table Should: solve problems Could: solve multi-step problems</p>	<p>Teach children to interpret data from tables to answer multi step questions. They use addition and subtraction to solve problems. What information can we get from the table? Where do we need to use tables in real life?</p>	<p>Chn look at data in a series of tables and answer questions on them.</p> <p>Chn think of their own questions to ask from a data set in a table.</p> <p>Target Your Maths3 p128/129</p>	<p>Tables Data Addition Subtraction</p>	<p>Children solve a problem of comparison</p>	<p>Exceeding ARE:</p> <p>At ARE:</p> <p>Below ARE:</p> <p>SEND</p> <p>PPG</p> <p>EAL</p>

The table shows which sports children play.

	Whitney	Jack	Eva	Mo	Teddy	Annie
Football	✓		✓	✓		✓
Rugby			✓		✓	
Tennis	✓	✓		✓		✓
Cricket			✓		✓	
Basketball		✓	✓	✓		✓

How many children play tennis?

Which sports does Mo play?

Which children play football and tennis?

Which child plays the most sport?

How many questions can you create for your partner about this table?

Day	Number of hours shop is open
Monday	8
Tuesday	8
Wednesday	4
Thursday	10
Friday	7
Saturday	12

The table shows the increase in bus ticket prices.

- The cost of Ron's new ticket is 60p. How much was his ticket last year? How much has the price increased by?
- Which ticket price has increased the most from 2016 to 2017? Which ticket price has increased the least?

1 st January	
2016	2017
44p	49p
56p	60p
64p	69p
76p	85p
85p	93p
98p	£1.03
£1.05	£1.11

Eva has created a table to show how many boys and girls took part in after school clubs last week.

Day	Boys	Girls
Monday	11	9
Tuesday	18	12
Wednesday	13	11
Thursday	8	8
Friday	9	7

Eva says,



106 boys took part in after school clubs last week.

Is Eva correct?

Explain why.