

# Homework/Extension

## Step 2: Comparison, Sum and Difference

### National Curriculum Objectives:

Mathematics Year 4: (4S1) [Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs](#)

Mathematics Year 4: (4S2) [Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs](#)

### Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

**Developing** Calculate the sum for each set of data. Includes pictograms, tables and bar charts using scale intervals of 1 or 2, with some use of half intervals. Uses a maximum of 4 sets of data.

**Expected** Calculate the sum for each set of data. Includes pictograms, tables and bar charts using multiples of 10 for scale intervals, with some use of half intervals. Uses a maximum of 4 sets of data.

**Greater Depth** Calculate the sum for each set of data. Includes pictograms, tally charts, tables and bar charts using multiples of 5 for scale intervals, where not all increments are marked and with some use of half intervals. Uses a maximum of 4 sets of data.

Questions 2, 5 and 8 (Varied Fluency)

**Developing** Calculate the differences between the data in bar charts. Write three questions about the data totals. Scale intervals and number of sets to match Question 1.

**Expected** Calculate the differences between the data in bar charts. Write three questions which compare the data. Scale intervals and number of sets to match Question 4.

**Greater Depth** Calculate the differences between the data in bar charts. Write three questions about the data. Scale intervals and number of sets to match Question 7.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

**Developing** Explain what is the same and what is different about 2 sets of data. Chart types, scale intervals and number of sets to match Question 1.

**Expected** Explain what is the same and what is different about 2 sets of data. Chart types, scale intervals and number of sets to match Question 4.

**Greater Depth** Explain what is the same and what is different about 2 sets of data. Chart types, scale intervals and number of sets to match Question 7.

More [Year 4 Statistics](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Comparison, Sum and Difference

1. Calculate the totals for each set of data.

● = 2 cars

*Goals scored in football tournament*

Match	Score	Total Goals
Town vs. City	2 – 1	
United vs. Wolves	1 – 2	
Athletic vs. Villa	2 – 2	
Borough vs. Rovers	1 – 0	

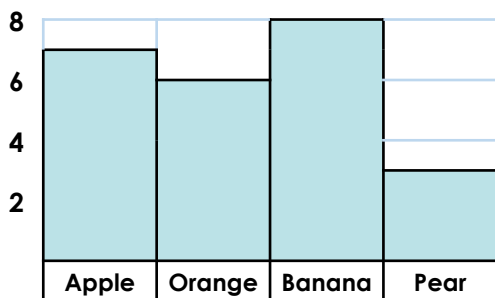
Day	Number of Cars Sold	Total
Thursday	● ●	
Friday	● ● ● ◐	
Saturday	● ● ● ● ●	
Sunday	● ● ● ● ◐	



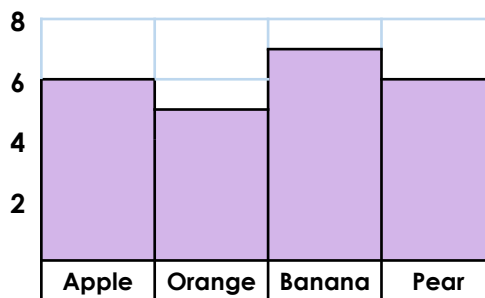
VF  
HW/Ext

2. Calculate the difference for each fruit.

*Year 1's Favourite Fruit*



*Year 2's Favourite Fruit*



Differences	
Apple	
Orange	
Banana	
Pear	

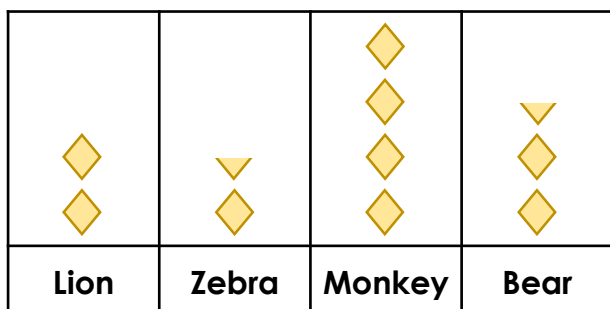
Write 3 questions which compare the data.



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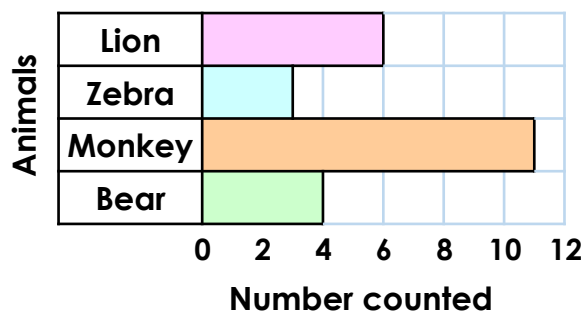
3. What is the same? What is different?

*A Animals counted at a safari park.*



◆ = 2 animals

*B Animals counted at a zoo.*



RPS  
HW/Ext

# Comparison, Sum and Difference

4. Calculate the totals for each set of data.

● = 10 animals

*Bank holiday visitors to the Art Gallery*

Days	Visitors (AM)	Visitors (PM)	Total Visitors
Friday	30	40	
Saturday	80	70	
Sunday	70	60	
Monday	20	30	

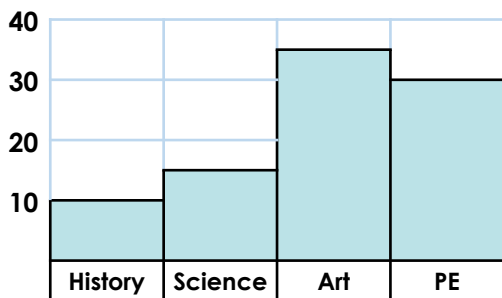
Teams	Number of Goals	Total
Foxes	● ● ●	
Owls	● ● ● ●	
Rams	● ● ◐	
Stags	● ● ● ● ◐	



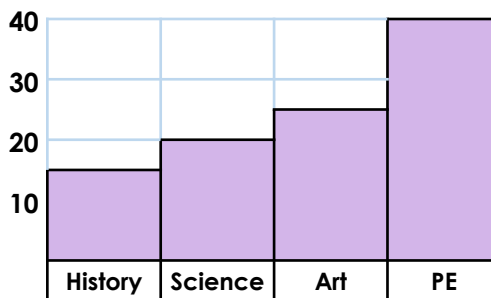
VF  
HW/Ext

5. Calculate the difference for each subject.

*Year 3's Favourite Subjects*



*Year 4's Favourite Subjects*



*Differences*

Subject	Difference
History	
Science	
Art	
PE	

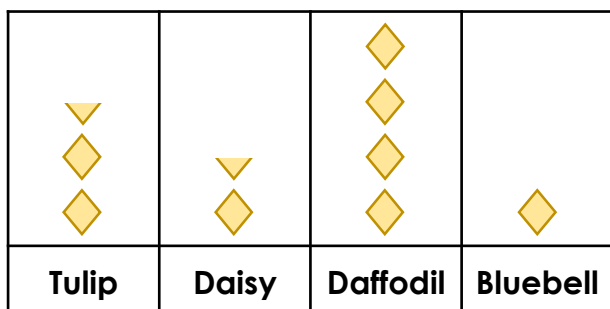
Write 3 questions which compare the data.



VF  
HW/Ext

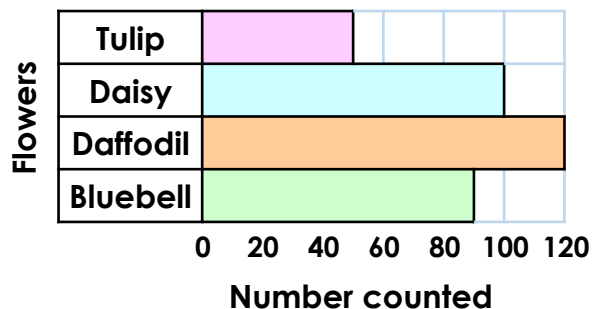
6. What is the same? What is different?

*A Flowers counted in the local park.*



◆ = 20 flowers

*B Flowers counted on a woodland walk.*



RPS  
HW/Ext

# Comparison, Sum and Difference

7. Calculate the totals for each set of data.

*Members of after-school clubs*

Club	Boys	Girls	Total Members
Rugby	25	15	
Yoga	20	25	
Art	25	35	
Chess	15	15	

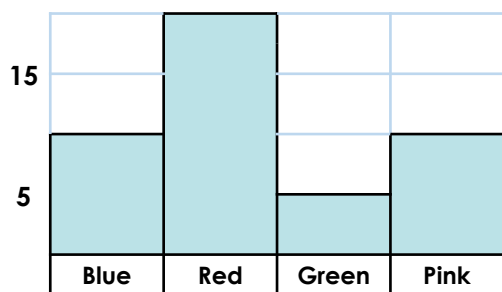
Runner	Time to Complete Race in Minutes	Total
Adam		
Holly		
Peter		
Daisy		



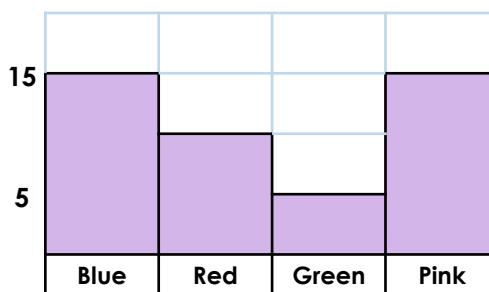
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HW/Ext

8. Calculate the difference for each colour.

*Year 5's Favourite Colours*



*Year 6's Favourite Colours*



*Differences*

Blue	
Red	
Green	
Pink	

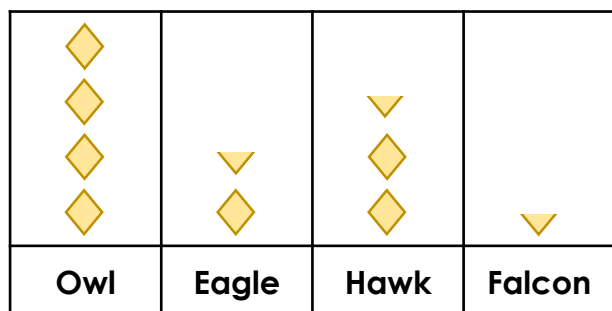
Write 3 questions which compare the data.



VF  
HW/Ext

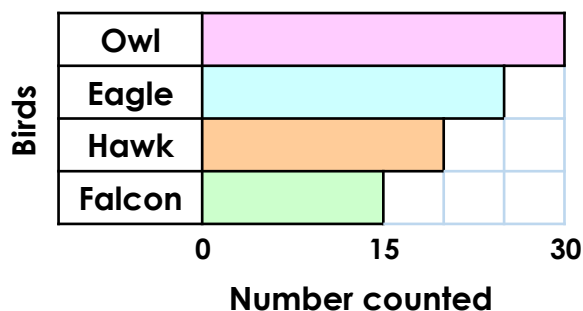
9. What is the same? What is different?

*A Birds counted in the sanctuary.*



◆ = 50 birds

*B Birds counted in the wildlife park.*



RPS  
HW/Ext

# Homework/Extension

## Comparison, Sum and Difference

### Developing

- 3, 3, 4, 1; 4, 7, 10, 9
- 1, 1, 1, 3; Various possible answers, for example: Which year group prefers pears? Which fruit got the least votes? Which fruit got 15 votes altogether?
- Various possible answers, for example: Same – monkeys were the most common animals counted, zebras were the least common, 3 zebras were counted in both sets of data. Different – the number of lions, monkeys and bears counted, there were more bears than lions at the safari park but there were more lions than bears at the zoo.

### Expected

- 70, 150, 130, 50; 30, 40, 25, 45
- 5, 5, 10, 10; Various possible answers, for example: Which year group prefers science? Which subject got the least votes? Which subject got 60 votes altogether?
- Various possible answers, for example: Same – daffodils were the most common in both data sets, 50 tulips were counted in both data sets. Different – the number of daisies, bluebells and daffodils found, A shows the least common flower was bluebells but data set B shows the least common was tulips.

### Greater Depth

- 40, 45, 60, 30; 20, 19, 18, 14
- 5, 10, 0, 5; Various possible answers, for example: Which colour received the same number of votes in each year group? Was blue more popular in Year 5 or 6? Which colour received the least votes?
- Various possible answers, for example: Same – falcons were the least common in both data sets, owls were the most common in both data sets. Different – there were more hawks than eagles in the sanctuary but more eagles than hawks in the wildlife park, there were hundreds of birds in the sanctuary and much fewer in the wildlife park.