

Discussion Problems

Step 2: Bar Charts

Teaching note: For Q1, an A3 copy on card and scissors may be necessary.

National Curriculum Objectives:

Mathematics Year 3: (3S1) [Interpret and present data using bar charts, pictograms and tables](#)

Mathematics Year 3: (3S2) [Solve one-step and two-step questions \[for example, 'How many more?' and 'How many fewer?'\] using information presented in scaled bar charts and pictograms and tables](#)

About this resource:

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

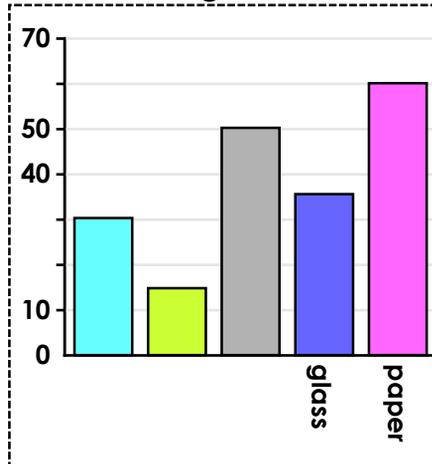
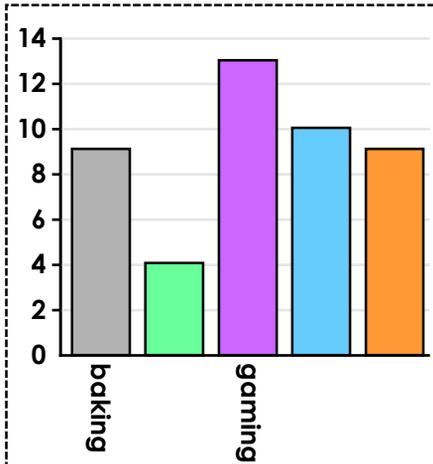
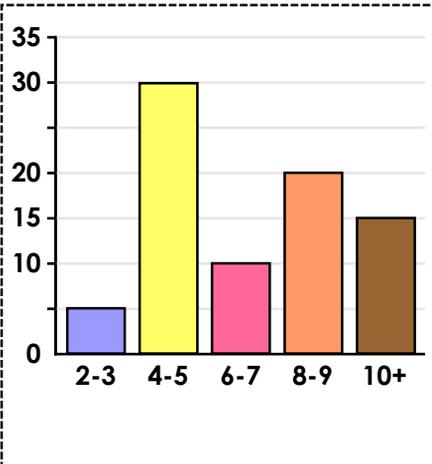
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 3 Statistics](#) resources.

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

Bar Charts

1. All three bar charts below have some missing information. Sort the cards below so that each bar chart has at least two cards which describes what is being shown.



A bar chart to show items that have been recycled.

The total number of children surveyed was a multiple of 5.

The smallest value used in this graph has an even digit sum.

This bar chart has two odd and three even values.

The largest value is a multiple of 3.

Two categories in this bar chart have an identical value.

A bar chart to show children's favourite hobbies.

A bar chart to show the length of adults' first names.

DP

2. Class 3W are discussing when their parents were born as part of their history topic.



Aisha

The least popular category was the year 1986.



Finley

Each child adds information about their mum and dad.



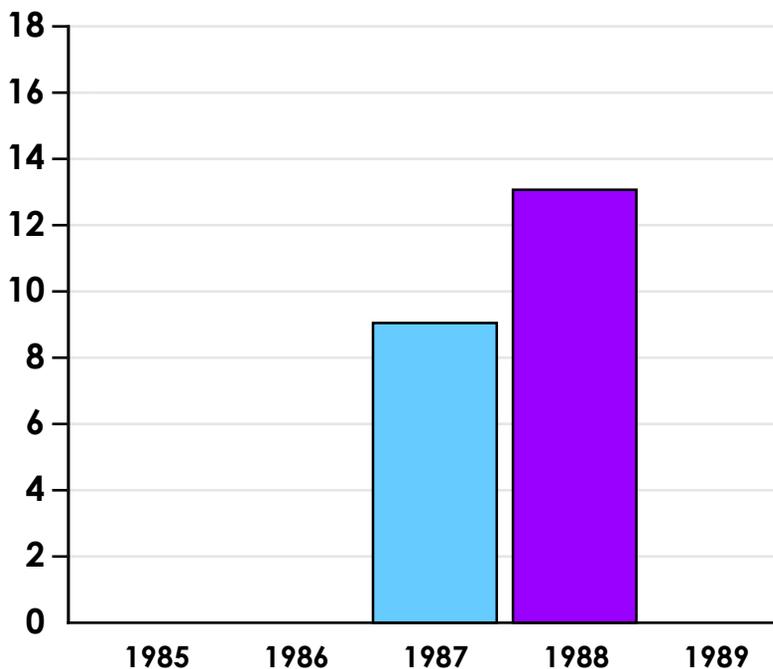
Shauna

The total value of 1986 and 1988 equals the value of 1989.



Troy

In our class, there are between 28 and 35 children.

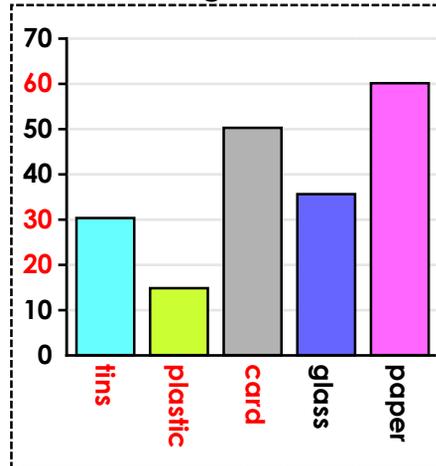
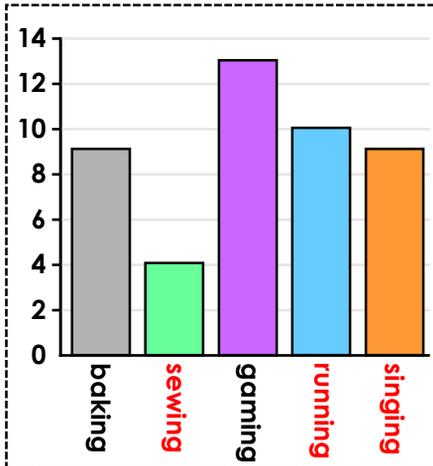
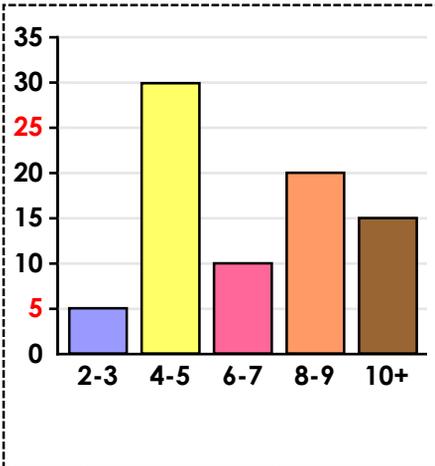


Using the clues above, explore how many of the children's parents could have been born in 1985, 1986 and 1989 to complete the bar chart.

DP

Bar Charts

1. All three bar charts below have some missing information. Sort the cards below so that each bar chart has at least two cards which describes what is being shown.



The total number of children surveyed was a multiple of 5.

The largest value is a multiple of 3.

Two categories in this bar chart have an identical value.

A bar chart to show items that have been recycled.

This bar chart has two odd and three even values.

A bar chart to show the length of adults' first names.

A bar chart to show children's favourite hobbies.

The smallest value used in this graph has an even digit sum.

Various answers. One example of how the cards could be sorted is shown above.

DP

2. Class 3W are discussing when their parents were born as part of their history topic.



Aisha

The least popular category was the year 1986.



Finley

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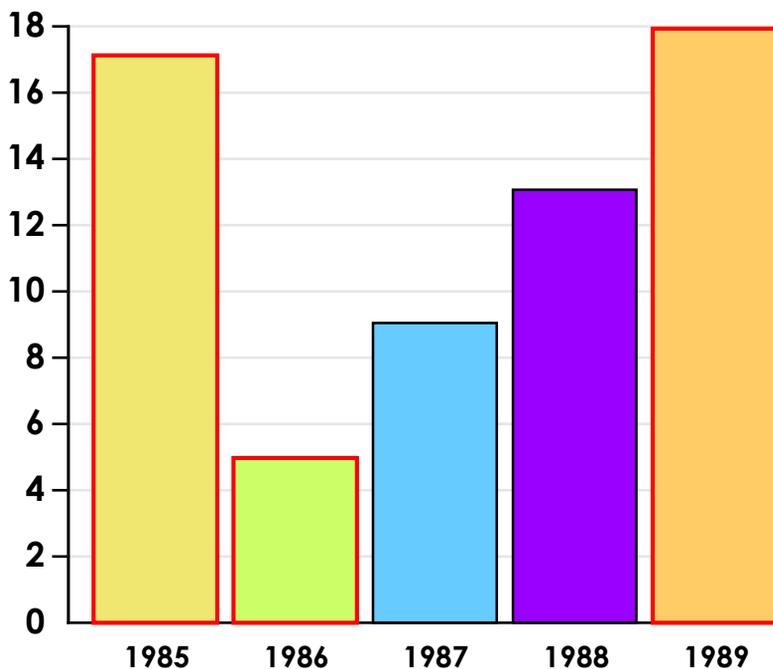
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Troy

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Various answers. An example is shown above. 1985 = 17, 1986 = 5 and 1989 = 18.

DP