

Discussion Problems

Step 5: Read and Interpret Pie Charts

National Curriculum Objectives:

Mathematics Year 6: (6S1) [Interpret and construct pie charts and line graphs and use these to solve problems](#)

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.

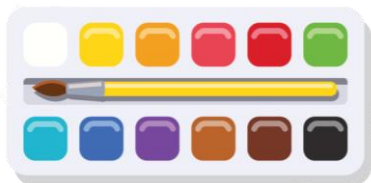
More [Year 6 Statistics](#) resources.

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

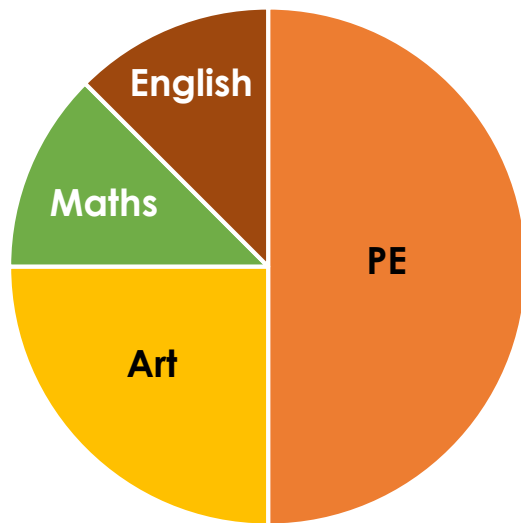
Read and Interpret Pie Charts

1. Below is a pie chart that shows the favourite subjects of two year 6 classes together. The two classes have between 40 and 60 children in them in total.

Using the information above, explore the different possible number of children in each section of the pie chart below.



Favourite Subject in Year 6.



DP

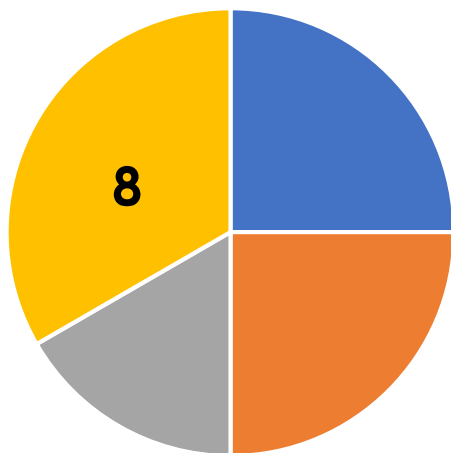
2. Helen has invited 24 friends to her birthday party. She has asked her friends where they would like to go for it and has created a pie chart to show her results.

Afterwards, Helen invited 8 more friends and she recalculated her pie chart.

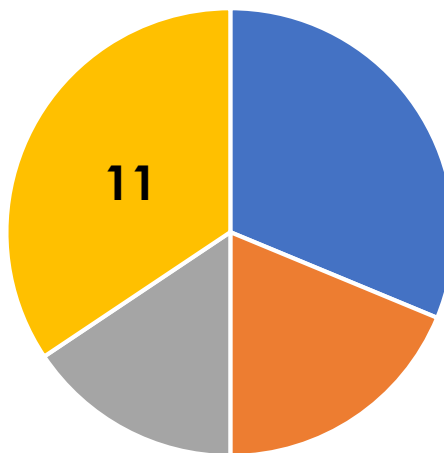
Investigate how the other sections have been affected in her new pie chart.

Location for Helen's Birthday Party

Location for Helen's Birthday Party



- Cinema
- Beach
- Bowling
- Laser tag



- Cinema
- Beach
- Bowling
- Laser tag

Original Results

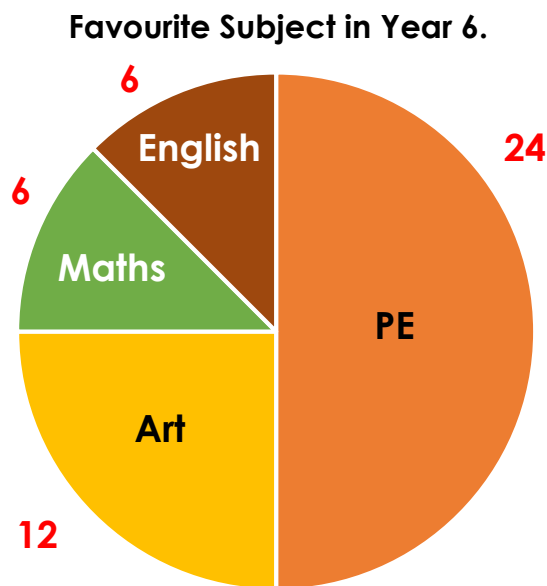
New Results

DP

Read and Interpret Pie Charts

1. Below is a pie chart that shows the favourite subjects of two year 6 classes together. The two classes have between 40 and 60 children in them in total.

Using the information above, explore the different possible number of children in each section of the pie chart below.



Various possible answers including the one shown above.

DP

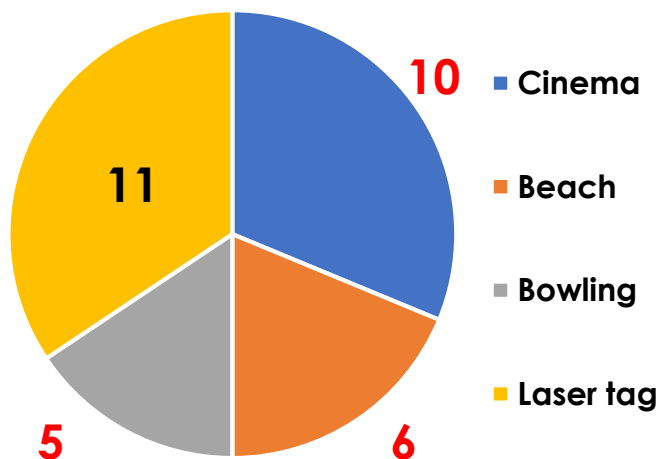
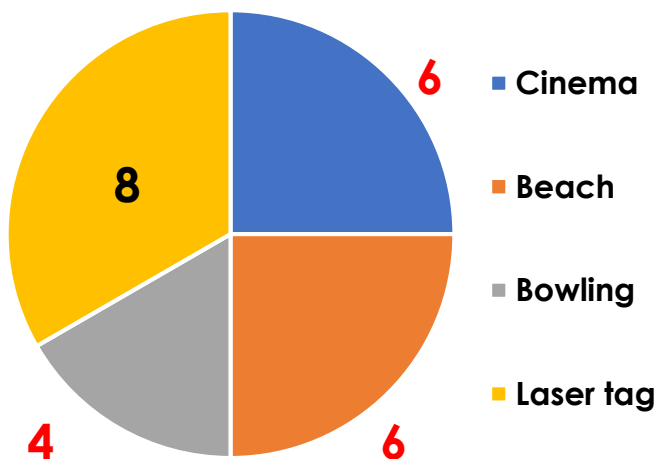
2. Helen has invited 24 friends to her birthday party. She has asked her friends where they would like to go for it and has created a pie chart to show her results.

Afterwards, Helen invited 8 more friends and she recalculated her pie chart.

Investigate how the other sections have been affected in her new pie chart.

Location for Helen's Birthday Party

Location for Helen's Birthday Party



Original Results

New Results

DP