

Discussion Problems

Step 1: Read and Interpret Line Graphs

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.

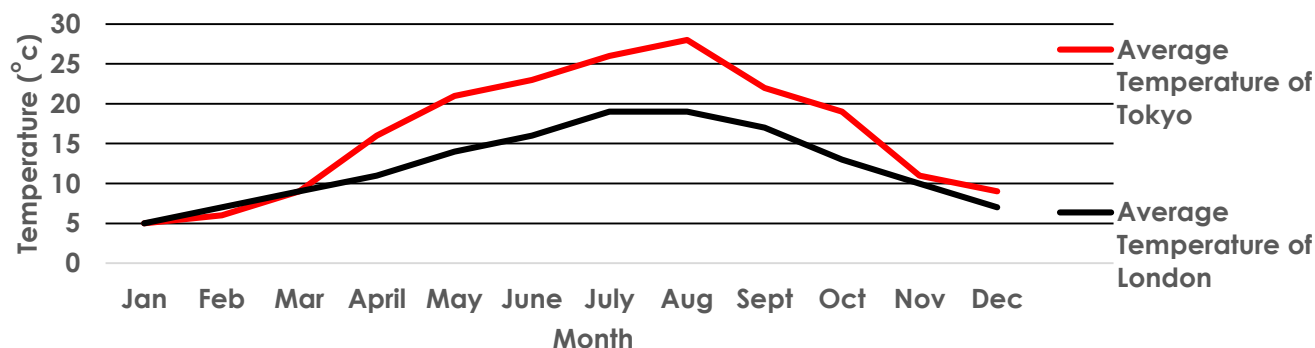
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Read and Interpret Line Graphs

1. Amy has plotted the average midday temperatures of 2 cities throughout the year on a line graph in order to compare them.



Average Midday Temperatures in Tokyo and London



Discuss what questions you could ask using the graph above. Can you think of any questions that would be suitable for both lines?

DP

2. Helen and her friends are going to record different results for a maths project.



Helen

I am going to record the shoe size of everyone in my year.

I am going to record the temperature in my house for a week.



Brenda

I am going to record my sister's height over the year.



Dianne



Graham

I am going to record the number of goals in a football game.

Discuss who will find their results more useful if they all use line graphs. Explain your answer.

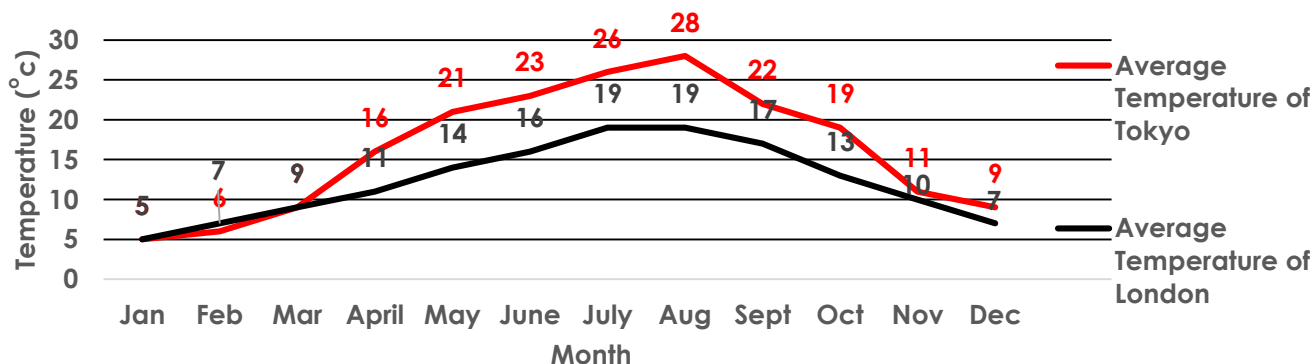
DP

Read and Interpret Line Graphs

1. Amy has plotted the average midday temperatures of 2 cities throughout the year on a line graph in order to compare them.



Average Midday Temperatures in Tokyo and London



Discuss what questions you could ask using the graph above. Can you think of any questions that would be suitable for both lines?

Various possible answers, for example:

In which month was the average midday temperature the same in both cities?

DP

2. Helen and her friends are going to record different results for a maths project.



Helen

I am going to record the shoe size of everyone in my year.

I am going to record the temperature in my house for a week.



Brenda

I am going to record my sister's height over the year.



Dianne



Graham

I am going to record the number of goals in a football game.

Discuss who will find their results more useful if they all use line graphs. Explain your answer.

Various possible answers, for example:

Brenda and Dianne will find their results more useful than Helen and Graham. This is because line graphs will give them more information because they are using continuous data whereas Helen and Graham only need to record definite statistics.

DP