

KS3 Mathematics Term 2 - Holidays

What is this project?

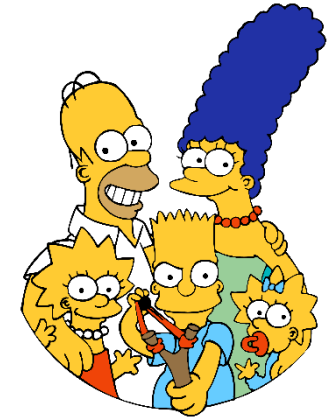
This project lasts five weeks and all the work needs to be included in your final masterpiece.

The Simpsons family are planning to go on a summer holiday but they can't agree where to go! Your job will be to research the destinations for the family. You will be making a travel brochure over the project which you would be able to give to the Simpsons family so they can make their best decision.

Homer and Bart Simpson - Rio de Janeiro, Brazil

Marge and Maggie Simpson - London, England

Lisa Simpson - Rome, Italy



How is this project marked?

The best pieces of work will be awarded value points. At the end of term Mr Huston will give you your final grade and decide on certificates. The criteria are listed below.

Grade	Criteria:
1 (Outstanding)	Project consistently handed in on time. All sections completed to a very high standard. Presentation is exceptional. Pupils have gone above and beyond what has been asked.
2 (Good)	Most sections are completed to a very high standard. Presentation is good throughout.
3 (Needs Improvement)	Some sections are completed to a high standard but some sections have not fully met the criteria. Presentation is clear but not planned.
4 (Poor)	The project is late. Some sections have not been completed. Presentation is messy

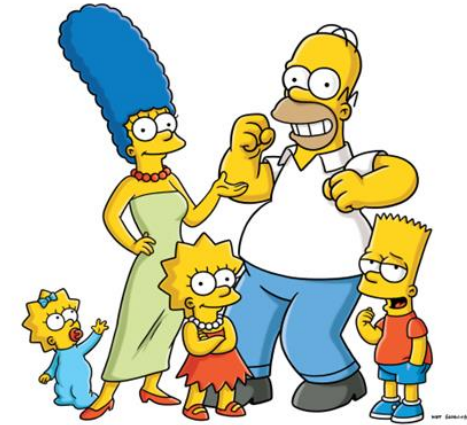
To achieve a silver certificate (5 value points), the final project needs to be completed to a high standard by the end and a clear amount of effort should have been put into the project. To achieve a gold certificate (10 value points) it needs to be clear that the project is exceptional.

**Week 1 -
Statistical
research**

This week you need to research basic information about each of the three destinations to begin your travel brochure.
You can make one page to represent all three destinations or multiple pages.

What do I need to include in my travel brochure pages?

- Basic information about each city
- An interesting fact about each city
- Statistical information about each city (see below)
- At least 1 graph to show your some of your information
- At least 1 table to show your some of your information.



Statistical Information

Here are some choices of statistical information you can research about each city. You need to choose at least two of the following:

- Average temperatures
- Average rainfall
- Average daylight hours
- The population

Extension:

Find the range of each of your sets of data.

If you are unsure, this shows you how to find the range: <http://www.mathsisfun.com/data/range.html>

For example: If Moscow is 8 degrees Celsius in July and Madrid is 29 degrees Celsius in July the range would be the biggest subtract the smallest which is $29-8 = 21$ degrees Celsius.

**Week 2 -
Collecting
and
analysing
data.**

For the next pages in your travel brochure you need to ask where other people think that the Simpsons should go on holiday from their three destinations.

For this you will need to design a questionnaire that you can ask at least 8 members of your family, friends or teachers.

What do I need to include in my travel brochure?

- A blank questionnaire that you created.
- The results of your questionnaire, so the Simpsons can use them to make their own decision. You could put them into a table, write them or use a tally chart.
- At least one graph (bar chart) to show the results of your question to the Simpsons.
- A written conclusion based off this week's research.

What does a good questionnaire have?

- A title
- At least one clear question
- Options for your question/s

What should my conclusion say?

- Which was the most popular destination from your results?
- Which was the least popular destination from your results?

Extension:

Draw, or use ICT, to make a pie chart of your results.



**Week 3 -
Cost
Comparison**

This week you are going to look at the currency for your three different countries.

1 - You need to find the price in Great British Pounds (GBP) for the following products (your choice for any specific products)

- A bunch of flowers for Marge.
- A pair of trainers for Homer
- A PS4 Game OR XBOXONE game for Bart.
- A scientific calculator for Lisa
- A bottle of milk for Maggie
- Any other items that you would like to include for the Simpsons

2 - Now you need to convert the British prices from London for each item above into the currencies for both Rio and Rome.

To do this you can use a conversion website such as http://www.onlineconversion.com/currency_conversion.htm

How do I present my research in my travel brochure?

It is your choice how to do this, but if you are still unsure how best to show the Simpsons your information, you could try the following:

- A table which shows GBP, and the other two currencies.
- A picture of each object with price tags from each currency.

Extension:

Research and compare the costs of return flights for a family of 5 from New York (where the Simpsons are choosing to fly from) to each of the destinations. You can choose how to show the information.



**Week 4 -
Food and
proportion**

1 - Find a cultural recipe for each of your holiday destinations.

E.G If Scotland was one of the destinations I might have chosen Haggis.

2 - Imagine you needed to cook each one of these recipes for yourself to try it out. Work out the amounts of each ingredient you would need for 1 person.

3 - Using part 2 to help you, you now need to work out the amounts for each recipe for 5 people (in the Simpsons family - Maggie doesn't need any, but Homer always eats 2 portions!)



How do I present this information for my travel brochure pages?

- **Must:** include the original recipes you have found for each country.
- **Must:** include the ingredients needed for each recipe for 1 person
- **Must:** include the ingredients needed for each recipe for the Simpsons family (5 portions)
- **Option:** You can always try cooking one of the recipes at home! If you do, take a photo to include with your project.
- **Option:** Drawn or printed pictures for each recipe.

Extension:

The Simpsons are going to have a Cultural house party before they go for 24 people where they will serve at least one of these recipes. You will need to adjust the ingredients appropriately.



**Week 5 -
Improvement
and
Presentation**

This week's task is to bring together all of your work into one piece, write a recommendation to the Simpsons and improve any previous tasks.

- 1 - Make a front cover for your brochure if you have not already done so.
- 2 - Check your SPAG and whether you have completed each task to the best of your ability.
- 3 - For the final page of your brochure you need to write a recommendation to the Simpson family advising them which country they should choose and explain why.

Optional: You can also use this time to improve your work from the feedback you have been given by your peers in class.

Questions to consider for your recommendation

- Which destination should the Simpsons choose?
- What reasons do you have to support your recommendation?
- Why were the other destinations not the best choice?

