



# Adapting to Climate Change

## Background

In Wales, the impacts of climate change are already being felt. These impacts are changing our weather, increasing the frequency of high temperatures, storms, floods and other extreme weather events. Experts say that if greenhouse gas emissions continue to increase everyday life could be severely affected.

As the projected impacts of climate change continue to be updated, you may wish to check on the most up to date figures to accurately complete the tasks below.

## Your task

### Step 1 - Temperature

- a. Investigate online tools to work out what the average summer and winter temperatures in degrees Celsius, were in your location, Wales or the UK, in 2018. Then work out the average temperature for the year.
- b. Record your findings in the table below.
- c. Find out what the projected temperatures for summer and winter will be in 2050 by completing the calculation. Write the number of degrees in the 2050 column. Then work out the average projected temperature for the year.
- d. Repeat to find out the projected temperatures for 2100. Then work out the average projected temperature for the year.

I have chosen my data from:

I believe this is a trusted source of information because:

	2018	2050	Write the answer here	2100	Write the answer here
<b>Summer temperature</b>		Increase by 3.4 degrees Celsius		Increase by 5 degrees Celsius	
<b>Winter temperature</b>		Increase by 2.5 degrees Celsius		Increase by 5.5 degrees Celsius	
<b>Average yearly temperature</b> (Add the summer and winter figures together and divide by 2)					



**Step 2 - Rainfall**

- a. Investigate trusted online tools to find out what our average summer and winter rainfall was in Wales or the UK in 2018.
- b. Add your findings to the table below.
- c. Calculate the expected average rainfall for summer and winter 2050 by adding or reducing according to the expected percentage found in the 2050 column and write the answer into the table.
- d. Repeat to find out the expected average rainfall for 2100 which is projected to either increase or decrease.

**I have chosen my data from:**

**I believe this is a trusted source of information because:**

	2018	2050	Write the answer here	2100	Write the answer here
<b>Summer rainfall</b>		<b>Decrease by 16%</b>		<b>Decrease by 56%</b> <b>Increase by 2%</b>	
<b>Winter rainfall</b>		<b>Increase by 14%</b>		<b>Increase by 29%</b>	
<b>Average yearly rainfall</b> (Add the summer and winter figures together and divide by 2)					



**Step 3 – Sea-level**

- a. Investigate trusted online tools to work out what the average sea-level was in Wales or the UK in 2018.
- b. Add your findings to the table below.
- c. Calculate the expected average sea-level for 2050 by adding the number of centimetres found in the 2050 column and write the answer into the table.
- d. Repeat to find out the expected average sea-level for 2100.

**I have chosen my data from:**

**I believe this is a trusted source of information because:**

	2018	2050	Write the answer here	2100	Write the answer here
Sea level		Increase by 22cm		Increase by 1.15 metres	

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