**Homework 1**

1. Choose, with a reason, the country found on the map in which you would expect to have the most volcanic eruptions. (2)



1. In 1960, parts of the ocean floor were surveyed at various distances from a plate boundary. The data shows the age of the rocks.



1. Describe the pattern in the results. (2)
2. Using the data, state what conclusions can be drawn about what is happening at the plate boundary. (2)
3. The diagram shows how the continents are arranged today.



1. State how Alfred Wegner suggested the surface of the Earth has changed over time. (1)
2. Give the evidence he used to support his theory. (3)
3. Give the reason why his theory was not accepted by some scientists. (1)

**Homework 2**

1. The table shows some data about the atmosphere between 1750 and 2000.



* 1. Describe the trend in average global temperature between 1750 and 2000. (2)
  2. State the increase in average global temperature (in oC) between 1900 and 2000. (1)
  3. State the increase in concentration of carbon dioxide in the atmosphere (in parts per million) between 1800 and 2000. (1)
  4. Calculate the overall average global temperature, giving your answer to 1 decimal place. (2)
  5. Calculate the percentage (%) increase in the concentration of carbon dioxide in the atmosphere from 1750 to 1850, giving your answer to 1 decimal place. (2)
  6. Calculate the percentage (%) increase in average global temperature from 1750 to 2000, giving your answer to 1 decimal place. (2)

1. The graphs show the changes in carbon dioxide levels and atmospheric temperature between 1960 and 2005.



Describe how the evidence from the graphs can be used to support and to oppose the statement:

“Global warming is caused by releasing carbon dioxide into the atmosphere.” (2)

**Homework 3**

1. The table shows the mass of sulfur dioxide (SO2) emitted in a country during certain years.

|  |  |
| --- | --- |
| *Year* | *Mass of SO2 emitted (million tonnes)* |
| 2005 | 4.0 |
| 2007 | 3.5 |
| 2009 | 3.0 |
| 2011 | 2.8 |
| 2013 | 2.5 |
| 2015 | 2.2 |

1. Calculate the percentage (%) decrease in SO2 emissions between 2007 and 2011. (2)
2. Calculate the percentage (%) decrease in SO2 emissions between 2013 and 2015. (2)
3. Calculate the percentage (%) decrease in SO2 emissions between 2005 and 2009. (2)
4. The mass of SO2 emitted in 2012 was a 10 % decrease from 2009. Calculate the mass of SO2 emitted in 2012 (in million tonnes). (2)
5. The country’s target is to decrease their SO2 emissions in 2015 by a further 20 %. Calculate this target (in million tonnes). (2)
6. The graph shows the amount of coal burnt and sulfur dioxide emissions in the USA between 1970 and 2008.



1. State why the data shown in the graph is not as expected. (2)
2. Suggest a possible reason for the unexpected data. (1)