In this investigation we will use the following section headings:

* **Introduction**
* **Results**
* **Analysis**
* **Conclusions**
* **Methods**
* **Evaluation**

1. Use the Section heading **Introduction** before answering the following questions; try to answer them in the form of a paragraph (not separately):
   1. What is coastal flooding?
   2. What is erosion?
   3. What happened in December 2013?
   4. What happened in January 2014?
   5. What happened in February 2014
2. Try to carry out research before answering this question:

**How does the sea wear away the land?**

Try to answer them in the form of four short paragraphs (not separately):

* 1. Put a sub-heading **Erosion**

**Paragraph 1**

* 1. What is Erosion?
  2. Explain that erosion involves some form of transportation.
  3. What are the four different ways in which erosion can be caused by the sea?

**Paragraph 2**

* 1. Put a subheading **Hydraulic Action**
  2. How could just the water of a wave wear away the land?
  3. How could air trapped by a wave wear away the land?

**Paragraph 3**

* 1. Put a subheading **Corrasion**
  2. Explain that corrasion is sometimes called **abrasion.**
  3. How could rocks and stones carried by a wave wear away the land?

**Paragraph 4**

* 1. Put a subheading **Attrition**
  2. How could the rocks and stones carried by a wave get:
     1. Smaller?
     2. Rounder?
     3. Smoother?

**Paragraph 5**

* 1. Put a subheading **Corrosion**
  2. Explain that corrosion is sometimes called **solution.**
  3. Describe what happens when you stir a spoon of sugar into a cup of warm water.
  4. Explain how you would use the word **dissolve** to explain this process.
  5. Describe that some parts of some rocks can **dissolve** if there is acid in the water.
  6. Explain that this is called **corrosion** or **solution**.

1. Use a subheading of ‘**Questions for Enquiry**’ before completing these activities:
2. Try to write 1 or 2 of your own questions for enquiry based on **secondary** (collected by someone else) data or use some of these examples:
   1. What happened to properties in the December 2013 storm?
   2. What happened to properties in the January 2014 storm?
   3. Is there a pattern between the storms and damage to sea defences?
   4. Try to write 1 question of your own for enquiry based on **primary** (collected by you) or other research that you carry out:
3. Use the Section heading **Results** before answering the following activities:

Use suitable graphs, maps and photographs to help you to answer your Questions for Enquiry.

|  |  |
| --- | --- |
| **Properties Flooded** | |
| Cardigan | 21 |
| Aberystwyth | 12 |
| Barmouth | 15 |
| Fishguard | 13 |

This table has been extracted for you as a start, but you should try to find other information yourself.

1. Try to do some research to find your own information to help you to answer your **Questions for Enquiry**. Put information into tables and then try to show it in graphs.
2. Use the Section heading **Analysis** before answering the following activities.
3. For any graphs you have drawn or used and for each map and photograph that you have used write a paragraph that helps you explain what they show you, include:
   1. Which map or graph are you writing about? What is its title?
   2. Actual numbers; what is the highest? What is the lowest? What is the range (difference between highest and lowest)?
   3. What does this show you?
   4. Why is it important?
4. Use the Section heading **Conclusions** before answering the following activities:
   1. For each of your enquiry questions write a paragraph (do not answer these question individually but use them to help build up a paragraph) to show what have you found out?
      1. What is the answer?
      2. Where is your evidence (which maps or graphs)?
      3. Do you have any actual numbers to back up your conclusion?
5. Use the Section heading **Methods** before answering the following activities:
   1. Describe how you gathered any information.
      1. How did you collect information?
      2. What was good about this?
      3. What was bad about this?
   2. Describe the sources of information you gathered.
      1. What was good about the source?
      2. What was bad or weak about the source?
      3. Do you think the source was biased or was it reliable and fair?
   3. Describe the graphs types that you chose to show your data.
      1. What was good about your choice?
      2. What was bad or weak about your choice?
      3. Is there a better way for you to do this next time?
6. Use the Section heading **Evaluation** before answering the following questions in the form of paragraphs (not separately):
   1. Evaluate your **methods**:
      1. What was successful?
      2. What went wrong?
      3. What could you do differently next time?
   2. Evaluate your **sources** – (your information and data):
      1. Which are reliable and why?
      2. Which might be biased and why?
   3. Evaluate your **outcomes** – (your conclusions):
      1. What is reliable and why?
      2. Which may be wrong or inaccurate and why?