

### Pre-Reading Task



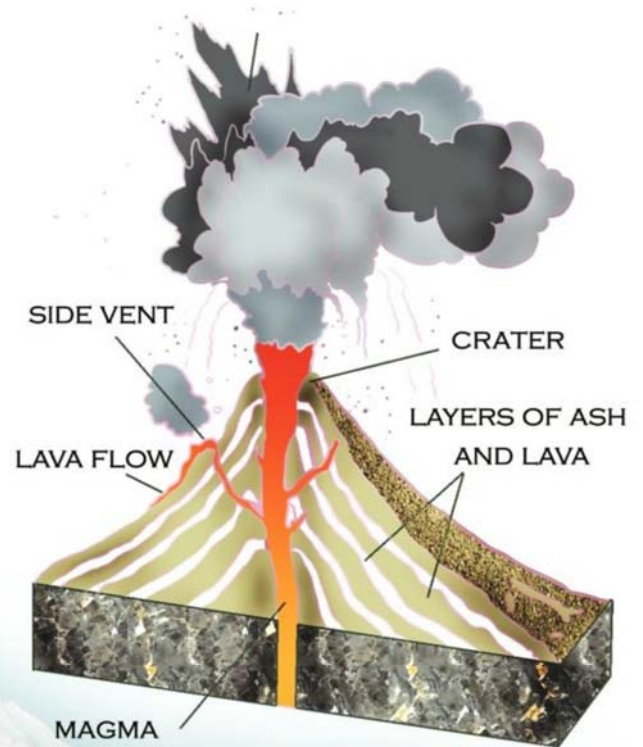
Read the following descriptions of natural disasters and discuss with your teacher the damage caused by natural disasters.

A **glacier** is a large mass of ice that acts like a river, flowing downhill under the influence of gravity.

**Volcanoes** are **mountains**, but they are very different to other mountains; volcanoes are formed when molten lava, ash, and gases are ejected from an opening in the earth's crust and deposited in the area to form a mountain.

Look at the illustration below. Can you spot where the original opening in the earth's crust was?

### THE ERUPTION OF A VOLCANO



# Floods the Awesome POWER!



**Flash Floods** can strike at any time and in any place with little or no warning. In mountainous or flat terrain, distant rain may be channelled into gullies and ravines, that could turn a quiet peaceful campsite into a rampaging torrent in minutes.

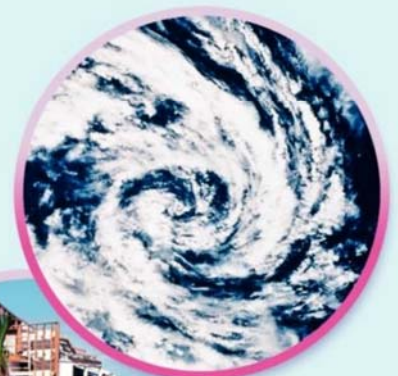
Of all the tricks in Mother Nature's weather bag, the deadliest in the United States today is flooding and flash flooding. An average of 100 people lose their lives in floods annually, with flood damage averaging more than \$2 billion a year.

**Hurricanes** are severe tropical storms that form in the southern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and the eastern Pacific Ocean. Hurricanes gather heat and energy through contact with warm ocean waters. Evaporation from the seawater increases their power.



Hurricanes rotate in a counter-clockwise direction around an 'eye' and generate winds of at least 74 miles per hour. When they come onto land, the heavy rain, strong winds and heavy waves can damage buildings, trees and cars. The heavy waves are called a, 'storm surge.' Storm surges are very dangerous and a major reason why you **MUST** stay away from the ocean during a hurricane warning or hurricane.

**Tornadoes** are nature's most violent storms. Tornadoes must always be taken seriously as they can be very dangerous – sometimes even deadly. They come from powerful thunderstorms and appear as rotating, funnel-shaped clouds. Tornado winds can reach 300 miles per hour. They cause damage when they touch down on the ground and can damage an area one mile wide and 50 miles long. Tornadoes can occur at any time of the year, but the main season runs from March to August. The ability to predict tornadoes is limited. Usually a community will have at least a few minutes' warning. The most important thing to do is **TAKE SHELTER** when a tornado is nearby.



A



# EARTHQUAKES

**E**arthquakes are the shaking, rolling or sudden shock of the earth's surface. Earthquakes happen along fault lines in the earth's crust. Earthquakes can be felt over large areas although they usually last less than one minute. Earthquakes cannot be predicted – although scientists are working on it!

Most of the time, you will notice an earthquake because the ground will start to shake. You may also notice hanging plants swaying or objects wobbling on shelves. Sometimes you may hear a low rumbling noise or feel a sharp jolt. A survivor of the 1906 earthquake in San Francisco said the sensation was like riding a bicycle down a long flight of stairs.

The intensity of an earthquake can be measured. One method of measurement is called the Richter scale. Earthquakes below 4.0 on the Richter scale usually do not cause damage, and earthquakes below 2.0 usually can't be felt. Earthquakes over 5.0 on the scale can cause damage. A magnitude 6.0 earthquake is considered strong and a magnitude of 7.0 and above is a major earthquake.

Earthquakes are sometimes called tremors, quakes, shakers or seismic activity. The most important thing to remember during an earthquake is to **DROP, COVER and HOLD ON**. So remember to **DROP** to the floor, get under something for **COVER** and **HOLD ON** during the shaking.

Underline the key words in the question.

Underline the phrase in the text which provides the answer to the question.

Simply write the required answer briefly and if possible in your own words.

## Reading Comprehension



Answer the following questions briefly and to the point.

- 1 Can we know if an earthquake will occur in advance?
- 2 List three signs that indicate that an earthquake is in progress.
- 3 How are earthquakes measured?
- 4 When can earthquakes cause damage?
- 5 Explain how you can protect yourself when there is an earthquake in progress.

## Mark Twain and the October 8, 1865 San Francisco Earthquake

As a Confederate soldier, the famous American novelist Mark Twain headed west with his Unionist brother to see the Wild West. His experiences are captured in the novel, 'Roughing It', one of Twain's earlier works. In the autumn of 1865, while in the city of San Francisco, Twain experienced his first earthquake.

*It was just after noon, on a bright October day. I was coming down Third Street. The only objects in motion anywhere in sight in that thickly built and populous quarter were a man in a buggy behind me, and a streetcar wending slowly up the cross street. Otherwise, all was solitude and Sabbath stillness.*

*As I turned the corner, around a frame house, there was a great rattle and jar, and it occurred to me that here was an item!--no doubt a fight in that house. Before I could turn and seek the door, there came a terrific shock; the ground seemed to roll under me in waves, interrupted by a violent joggling up and down, and there was a heavy grinding noise as of brick houses rubbing together. I fell up against the frame house and hurt my elbow. I knew what it was now ... a third and still severer shock came, and as I reeled about on the pavement trying to keep my footing, I saw a sight! The entire front of a tall four-story brick building on Third Street sprung outward like a door and fell sprawling across the street, raising a great dust-like volume of smoke!*

*And here came the buggy--overboard went the man, and in less time than I can tell it the vehicle was distributed in small fragments along three hundred yards of street. ... The streetcar had stopped, the horses were rearing and plunging, the passengers were pouring out at both ends, and one fat man had crashed halfway through a glass window on one side of the car, got wedged fast, and was squirming and screaming like an impaled madman. Every door, of every house, as far as the eye could reach, was vomiting a stream of human beings; and almost before one could execute a wink and begin another, there was a massed multitude of people stretching in endless procession down every street my position commanded. Never was a solemn solitude turned into teeming life quicker.*

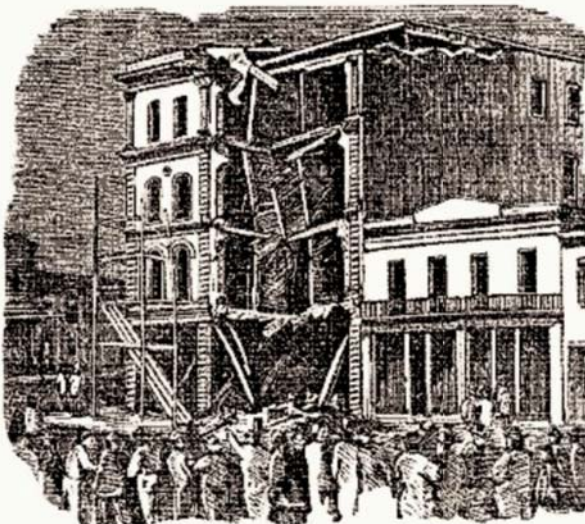


Image courtesy of *The Museum of the City of San Francisco*

This image shows a four-storey brick building on the corner of Third and Mission streets in San Francisco following the 1865 earthquake. It appeared in *The Daily Alta California*, and is probably the very same building Twain describes as being, 'sprung outward like a door.'

### Note-Taking

Underline the key word(s) in the text.

Underline the relevant words/phrases/sentences in the text.

Simply write the required notes briefly and, if possible, in your own words.

Complete sentences are not required.

If a list is given, summarise it.  
e.g. **High winds, heavy rain and fog** can be summarised as **violent weather** or **unfavourable weather conditions**.

#### Movement breaking the stillness prior to the earthquake

- .....
- .....

#### Sounds made by the earthquake

- .....
- .....

#### Description of ground movements caused by the earthquake

- .....
- .....

#### Physical effects of the earthquake on Twain

- .....
- .....
- .....

#### Damage witnessed by Twain

- .....
- .....

#### Reaction of people

- .....
- .....
- .....

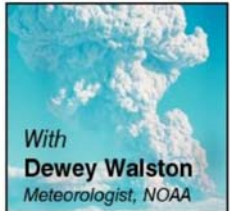
### Summary

Imagine you are Twain. Write a summary of about 100 words using the notes you have made to describe your experience.

# B TORNADO

## DEADLY TORNADO HITS LA PLATA, MD.

Monday, April 29, 2002; 3 p.m. EST



"A deadly and devastating tornado roared across Southern Maryland last night, killing at least three people, demolishing stores and houses and littering streets with overturned cars, torn power lines and fallen trees.

A man was killed in La Plata, the seat of Charles County, and a woman was killed in Prince Frederick, the seat of Calvert County, according to the Maryland Emergency Management Agency. This morning, the death of a third person was confirmed, according to a

Charles County spokesman and police officials. The person was found in a car at the intersections of Routes 6 and 301, said the spokesman, who could not say if the person was a man or a woman. More than 90 people were treated for injuries at area hospitals."



### Reading Comprehension



This is a newspaper article. Observe and discuss with your teacher the following:

Headline

Author

Date

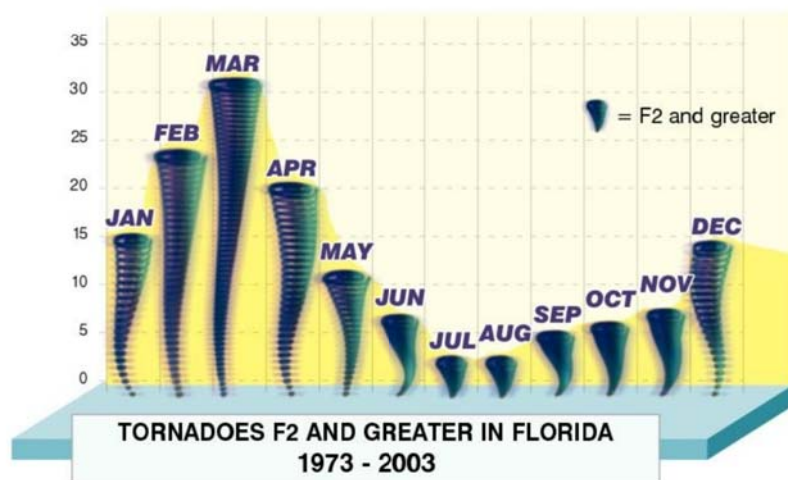
Vocabulary and structures used in the article.

Focus on adjectives like **deadly** and **devastating** as well as verbs like **roared**.

Note the use of passive voice.

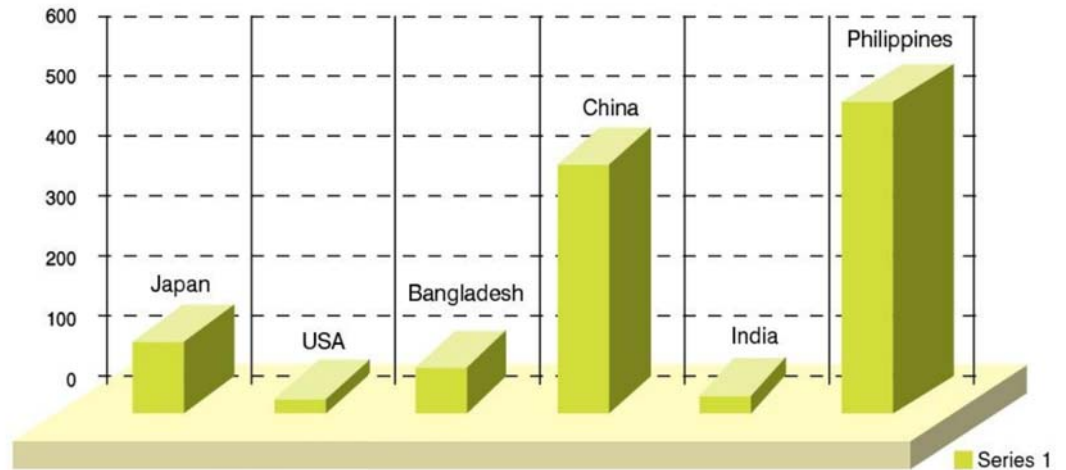
Answer the following questions briefly and to the point.

- 1 In what way was the tornado **deadly**?
- 2 In what way was the tornado **devastating**?
- 3 Quote a **word** which describes the sound the hurricane was making.



4 Look at the chart and answer the following questions:

- I During what 5 months does Florida have the most deadly tornadoes?
- II During which 2 months are tornadoes the least deadly?



5 Look at the chart and answer the following questions:

- I Which country suffered the most casualties as a result of natural disasters?
- II Which country had the fewest casualties?

## C HURRICANES

### What Is A Hurricane?

A hurricane is a tropical storm with winds that have reached a constant speed of 74 miles per hour or more. Hurricane winds blow in a large spiral around a relatively calm centre known as the 'eye.' The eye is generally 20 to 30 miles wide, and the storm may extend out around 400 miles. As a hurricane approaches, the skies will begin to darken and winds will grow in strength. Then, as it nears land, it can bring torrential rains, high winds, and storm surges. A single hurricane can last for more than 2 weeks over open waters and can run a path across the entire length of the eastern seaboard. August and September are the peak months of the hurricane season that lasts from June 1 through to November 30.

## What Should I Do?

**Before Hurricane Season Starts****Plan an evacuation route.**

Contact the local emergency management office or American Red Cross chapter, and ask for the community hurricane preparedness plan. This plan should include information on the safest evacuation routes and nearby shelters.

Learn safe routes inland.

Be ready to drive 20 to 50 miles inland to locate a safe place.

Have disaster supplies on hand.

Flashlight and extra batteries

Portable, battery-operated radio and extra batteries

First aid kit and manual

Emergency food and water

Non-electric can opener

Essential medicines

Cash and credit cards

Sturdy shoes

- **Make arrangements for pets.**

Pets may not be allowed into emergency shelters for health and space reasons. Contact your local humane society for information on local animal shelters.

- **Make sure that all family members know how to respond before a hurricane.**

Teach family members how and when to turn off gas, electricity and water. Teach children how and when to call 9-1-1, police, or the fire department and which radio station to tune in to for emergency information.

- **Protect your windows.**

Permanent shutters are the best protection. A lower-cost approach is to put up plywood panels. Use 1/2 inch plywood - marine plywood is best – cut to fit each window. Remember to mark which board fits which window. Pre-drill holes every 18 inches for screws. Do this long before the storm.

- **Trim back dead or weak branches from trees.**

- **Check out flood insurance.**

You can find out about the National Flood Insurance Programme through your local insurance agent or emergency management office. There is normally a 30-day waiting period before a new policy becomes effective.

Homeowner's policies do not cover damage from the flooding that accompanies a hurricane.

- **Develop an emergency communication plan.**

In case family members are separated from one another during a disaster (a real possibility during the day when adults are at work and children are at school), have a plan for getting back in touch.

Ask an out-of-state relative or friend to serve as the 'family contacts'. After a disaster, it's often easier to call long distance. Make sure everyone in the family knows the name, address and phone number of the contact person.



## DURING A HURRICANE WATCH

(A Hurricane Watch is issued when there is a threat of hurricane conditions within 24-36 hours.)

- Listen to a battery-operated radio or television for hurricane progress reports.
- Check emergency supplies.
- Make sure there is fuel in the car.
- Bring in outdoor objects such as lawn furniture, toys and garden tools. Then, anchor objects that cannot be brought inside.
- Secure buildings by closing and boarding up windows. Remove outside antennas.
- Turn refrigerator and freezer to coldest settings. Open only when absolutely necessary and close quickly.
- Store drinking water in clean bathtubs, jugs, bottles and cooking utensils.
- Store valuables and personal papers in a waterproof container on the highest level of your home.
- Review evacuation plan.
- Moor boat securely or move it to a designated safe place. Use rope or chain to secure boat to trailer. Use tiedowns to anchor trailer to the ground or house.

## DURING A HURRICANE WARNING

(A Hurricane Warning is issued when hurricane conditions (winds of 74 miles per hour or greater or dangerously high water and rough seas) are expected in 24 hours or less.)

- Listen constantly to a battery-operated radio or television for official instructions.
  - If in a mobile home, check tiedowns and evacuate immediately.
  - Avoid elevators.
- If at home:**
- Stay inside, away from windows, skylights, and glass doors.
  - Keep a supply of flashlights and extra batteries handy. Avoid open flames, such as candles and kerosene lamps, as a source of light.
  - If power is lost, turn off major appliances to reduce power 'surge' when electricity is restored.
- If officials indicate evacuation is necessary:**
- Leave as soon as possible. Avoid flooded roads and watch for washed-out bridges.
  - Secure your home by unplugging appliances and turning off electricity and the main water valve.
  - Tell someone outside of the storm area where you are going.
  - If time permits, and you live in an identified surge zone, elevate furniture to protect it from flooding or better yet, move it to a higher floor.
  - Take pre-assembled emergency supplies, warm protective clothing, blankets and sleeping bags to shelter.
  - Lock up home and leave.

### AFTER THE STORM: Wind & Flood - Rebuilding Techniques

- Stay tuned to local radio for information.
- Help injured or trapped persons.
- Give first aid where appropriate.
- Do not move seriously injured persons unless they are in immediate danger of further injury. Call for help.
- Return home only after authorities advise that it is safe to do so.
- Avoid loose or dangling power lines and report them immediately to the power company, police or fire department.
- Enter your home with caution. Beware of snakes, insects and animals driven to higher ground by flood water.
- Open windows and doors to ventilate and dry your home.
- Check refrigerated foods for spoilage.
- Take pictures of the damage, both of the house and its contents for insurance claims.
- Drive only if absolutely necessary and avoid flooded roads and washed-out bridges.
- Use telephone only for emergency calls.

### INSPECTING UTILITIES IN A DAMAGED HOME

- Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open a window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbor's home. If you turn off the gas for any reason, it must be turned back on by a professional.
- Look for electrical system damage. If you see sparks or broken or frayed wires, or if you smell hot insulation, turn off the electricity at the main fuse box or circuit breaker. If you have to step in water to get to the fuse box or circuit breaker, call an electrician first for advice.
- Check for sewage and water line damage. If you suspect sewage lines are damaged avoid using the toilets and call a plumber. If water pipes are damaged, contact the water company and avoid the water from the tap. You can obtain safe water by melting ice cubes.

There is no need to read the entire text in order to answer the questions.

**Reading Comprehension**



Answer the following questions briefly and to the point.

**Analysing information**

Observe the layout:

The information is presented:

- Briefly
- Concisely
- In point form
- Usually in the order the steps need to be taken
- Remember there is no need to read everything in the text.
- There is also no need to understand everything in order to answer the question.
- Underline the part in the text where the answer is to be found.

Scan reading? Look only for particular words or symbols.

Skim reading? Remember that usually, the first sentence of a paragraph is the topic sentence; the sentence that gives you a clue as to what the text is about.

**Topic sentence                  General idea of what will follow                  GIST**

*Short answers are required; single word/phrase*

- 1 What is the wisest course of action before the hurricane season starts?
- 2 In case of emergency what are you advised to do with your pet? Why?
- 3 What is the best way to protect your windows?
- 4 List at least three things that must be done when the Hurricane watch is issued so that your property is not swept away.

Skim the text until you find the place where the relevant information is to be found.

Scan for points.

Put points in order.

Remember to use appropriate topic sentences and joining words; Firstly, Following that, etc.

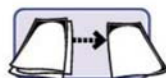
Now write the rough copy.

Make corrections.

Write fair copy.

Count words and write them underneath

**Summary**



**Imagine that you live in an area where there has been a hurricane warning. You have just been asked by the local authorities to evacuate. Describe in about 100 words what you did from the time the evacuation instructions were given until you reached a safe place.**

**D Listening Comprehension**



**Part 1**

- 1 How long was it since England and Wales had such a wet autumn?  
.....
- 2 Which area was particularly struck by floods?  
.....
- 3 How many calls did the agency get the previous year?  
.....
- 4 What number should you call in the case of flooding?  
.....
- 5 What two items should you use in the event of a flood?  
.....
- 6 List two items you should have in your flood kit in case of flooding and mention what else you are required to do.  
.....

**Part 2**

**Name: Malawati**

She was in the **1)** ..... Ocean for a period of **2)** ..... days.  
 The only reason she managed to survive was because she was clutching a **3)** .....  
 She was threatened by **4)** ....., but they did not hurt her.  
 She survived by eating **5)** ..... and **6)** ..... from the sago palm she clung to.  
 Age: **7)** .....  
 Her occupation is **8)** .....  
 Doctors discovered that she is **9)** ..... weeks pregnant.  
 Unfortunately, her husband is still **10)** .....  
 She comes from **11)** .....

**Part 3**

- 1 How was Helike destroyed?  
.....
- 2 When was Helike destroyed?  
.....
- 3 Where did archaeologists get information about Helike in the past?  
.....
- 4 List two things that archaeologists did in their effort to discover Helike.  
.....
- 5 What happens to the ground when liquefaction occurs?  
.....

Part 4

For Questions 1 – 6 you hear a series of short sentences. Answer each question on the line provided. Your answer should be as brief as possible. You will hear each item twice.

- 1 How much of the earth's surface is of volcanic origin?  
.....
- 2 In which year did the Mount St. Helen's volcano erupt killing many people and causing great destruction?  
.....
- 3 How many people were killed after the volcanic eruption in the Philippines in 1992?  
.....
- 4 About how many volcanoes are in the region that is around the Pacific Ocean?  
.....
- 5 Where can glaciers be found today, and what can global warming cause in the future?  
.....
- 6 List two ways we can find out more information about the lifestyle of ancient Egyptians?  
.....

E Form Filling



Complete the form, using the information provided in the following text. (See Appendix 1 - Fill in forms, p. 19)


After an earthquake in your area, you have decided to donate to your local Red Cross branch, £200 in memory of Ms. Janet Simpson, a good friend who was one of the many victims of the earthquake. The earthquake claimed many friends and relatives, including your brother's best friend, James, and his maternal grandparents in Italy. They lived at 46 Mayflower Close, just round the corner from where you live, 74 Watford Strata, Florence.

You feel that the Red Cross will help many victims of natural disasters, so you sent emails to all your friends all over the world, asking them to make their donations now, in memory of your friend. You have even sent your personal information such as name – Mary Fisher – address and email, [maryt07@yahoo.com](mailto:maryt07@yahoo.com) to the Principal of your old school in England, asking him to contact you so that you can explain the importance of making a donation to the Red Cross at this time. Your employer, Mr. Alexander Davidson, whom you also contacted, responded immediately and sent you an email from his personal email address [davidsona@yahoo.com](mailto:davidsona@yahoo.com) to tell you that he will donate £200, too. Although you are an American Express and MasterCard holder, you plan to pay by Visa because this card does not expire until January 2008. This card also has a very difficult to remember number; 8573923096523187. Mr. Davidson will use his Diners Card.

## YOUR LOCAL **RED CROSS** BRANCH

Your local Red Cross is committed to meeting the humanitarian needs of the people in your area, be it in disaster preparedness, disaster response, first aid and CPR training, or disease prevention. You can help support your local chapter programmes and services by a gift to your local Red Cross.

**NOTE:** Credit card information is required to ensure your credit card is securely and properly processed. This information is solely used for the processing of the credit card. Please enter an amount for your gift below.

 **Enter Amount 1)** ..... (minimum £5.00)

**Use Block CAPITALS**

**Does your employer match your contribution? 2)** .....

Employer's Name: **3)** .....

### Tribute or Memorial Honoree Information

Please complete the following information with regard to the person(s) you wish to honour or memorialize.

**Title: 4)** ..... (Mr. Mrs. Ms)

**First Name: 5)** .....

**Last Name: 6)** .....

Please supply your personal information below:

**Name: 7)** .....

**Address: 8)** .....

**City: 9)** .....

**Country: 10)** .....

**Email Address: 11)** .....

### Credit Card Information

**Credit Card**     (circle the relevant credit card)

**Card Number: 12)** .....

**Expiration month: 13)** .....

**Expiration year: 14)** .....

## F Writing



You live in an area where hurricanes are a common occurrence. Write an article for your school newspaper in which you describe:

- what you did when you heard the warning
- the hurricane itself
- the damage it caused
- your feelings

Your article should be about 200 words long.

## Plan

### Introduction

Contains general comments about hurricanes and a topic sentence to prepare reader as to what is to follow. Re-read the introductory statements of all the passages in Unit 1.

### Main Body

Each part of the question must be tackled. The use of suitable adjectives and adverbs will make your description more vivid.

**What you did:** Use linking words, such as:

*Firstly; First and foremost; Following that; In addition to that; Moreover; Furthermore; Next; The next step to take was; Finally/Lastly*

**The hurricane itself:**

- Use sounds: *roaring, deafening, howling*
- Use words or describe scenes which indicate the power of the hurricane: *hurled; snatched; swept away; high winds; Winds reach a speed of ...; The skies darken; heavy rain*

**The damage:**

- Discuss the damage caused to buildings, cars, trees, electricity etc.
- Don't forget to use topic sentences to introduce new material.
- Useful vocabulary: *deadly; devastating; a nightmare; took lives; demolished; uprooted trees; littered streets; overturned cars and buses*

**Feelings:** Use words such as the following, after you discuss them with your teacher. Use them orally in sentences during class discussion first.

*Absolutely terrified; jumped with fright; sobbed miserably; I was devastated; panic stricken; terrified; dreaded; it broke my heart; a shoulder to cry on*

### Conclusion

Your final thoughts and comments about hurricanes. You may want to express your relief when it was finally over.

## Fill in Forms

Read the instructions carefully and underline key words such as:

Circle the relevant information

Underline the relevant information

(✓) Tick the relevant information

Cross out the information that does not apply. (X)

Use **BLOCK** capitals: do not ignore this instruction.

Learn to use confidently the symbols of: € (**Euro**)  
\$ (**Dollar**) £ (**pound**)  
¥ (**Yen**)

Learn to write addresses correctly: Number, Street, City, Country.

Title: Mr Mrs Ms

Initials: If your name is James, your initial is **J**.

Look out for traps, eg. Mary **will** be 21 in May. When the age is required for form filling purposes, you will indicate that her age is 20.

If something does not apply: Not applicable or N/A or NONE

<b>Marital Status:</b>	Married, Single, Divorced, Separated, Widow, Widower
<b>Relationship:</b>	father, mother, sibling (brother or sister) spouse (husband, or wife)
<b>Dietary Requirements/ Restrictions:</b>	Allergic to .../ Vegetarian /Vegan/Lactose intolerant
<b>Education:</b>	nursery school/kindergarten, elementary/ primary/junior school, secondary/high school, gap year, first year at university /college, first degree/Bachelors/ BSc/BA, Masters/MSc, PhD /Doctorate/Course of study/ Major, e.g. Medicine, Law, Accounting, History, Politics, etc
<b>Charity Event:</b>	bazaar, sponsored walk/swim/ hikes/ cycling/marathons/Duke of Edinburgh, etc to raise money for charity by ...ing something/to raise money for ... Association/Trust, etc
<b>Final Part:</b>	You will be asked to write a sentence within a fixed word limit – usually 12-20 words. <ul style="list-style-type: none"> <li>Do not write outside these limits.</li> <li>It must be a proper sentence; not a fragment.</li> <li>Remember the correct structures for the following verbs: keen on doing, eager to do, look forward to doing.</li> </ul>