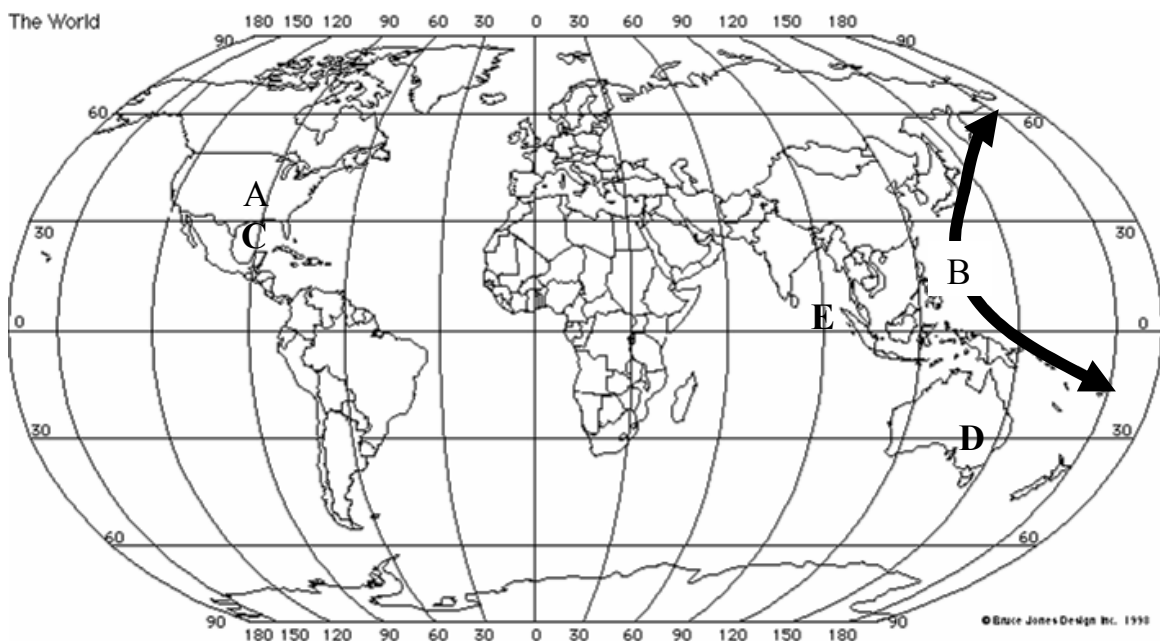


1. Complete the following table in spaces 1 – 30 to summarise disasters. [30]

<b>Exogenous disasters</b>	Primary effects	Secondary effects	Where most likely to occur in South Africa
Tropical cyclones [rare in RSA]	1	4	7
	2	5	
	3	6	
Thunderstorms	8	11	14
	9	12	
	10	13	
15 _____ <b>Disasters</b>	Primary effects	Secondary effects	Significant examples
Earthquakes	16	19	22
	17	20	
	18	21	
23	Pyroclastic flows	26	29 30
	24	27	
	25	28	

2. Refer to the world map provided. Write the letters A to E in a column on your answer sheet and match the letters A to E on the map with the numbers 1 to 5 of natural disasters listed below.

- |     |                                     |     |
|-----|-------------------------------------|-----|
| 2.1 | The Pacific Ring of Fire            | [1] |
| 2.2 | Hurricane Katrina                   | [1] |
| 2.3 | 2004 Tsunami                        | [1] |
| 2.4 | Tornado Alley                       | [1] |
| 2.5 | A place where wild fires are common | [1] |



3. How does a tropical cyclone [hurricane] affect a wealthy country such as the USA compared to a poor country, such as Mozambique. [6]
4. What is the difference between a hazard and a disaster? [4]
5. What causes a hazard to become a disaster? [4]
6. Imagine you are in charge of disaster management in your home area. Make a list of the four disasters that are most likely to strike in your area in order from most likely to least likely. [8]
7. What precautions should the local government take to lessen the impact of these hazards? [6]
8. What precautions should your school take to lessen the impact of these hazards? [6]
9. Some people are more at risk than others during a hazard event. Who are they and how can their risk be reduced? [6]

## **Memo**

- 1.1 Strong winds
  - 1.2 Heavy rain
  - 1.3 Storm surge / lightning
  - 1.4 Collapsed buildings
  - 1.5 Floods
  - 1.6 Land slides / disease
  - 1.7 Northern KwaZulu-Natal
  - 1.8 Lightning
  - 1.9 Wind / Tornadoes
  - 1.10 Hail / Heavy rain
  - 1.11 Fire
  - 1.12 Flash floods
  - 1.13 Power outages / Car accidents
  - 1.14 Highveld
  - 1.15 Endogenous
  - 1.16 Shaking ground
  - 1.17 Tsunami
  - 1.18 Landslides / mud slides
  - 1.19 Collapsed buildings
  - 1.20 Fire
  - 1.21 Disease / starvation
  - 1.22 Any well known event [e.g. Kobe, San Francisco, Phuket (Tsunami event)]
  - 1.23 Lava flows
  - 1.24 Lahars [Big mud avalanches from melted snow]
  - 1.25 Any well known event [e.g. Vesuvius (Pompeii), Mount St Helens]
- 2.
- |   |   |
|---|---|
| A | 4 |
| B | 1 |
| C | 2 |
| D | 5 |
| E | 3 |
3. Any five points, 2 marks per point.
- Wealthy country:  
Better warning systems, better disaster planning, quicker response.  
More damage to property [high cost] and relatively few lives lost. Long time to repair damage.
- Poor country:  
More loss of life, relatively low cost of property loss. Fairly quick to repair damage.
4. A hazard is anything that has the potential to be dangerous and to become a disaster.

5. Hazards become disasters when there is not enough planning; when there is not enough warning; inadequate emergency response; buildings are not designed to withstand the hazard; people ignore warnings etc.

6. Dependent on home area – any 4.

Highveld:	Fires, drought, lightning, hail, flash floods
Western and Eastern Cape:	Fire, drought, wind, cold weather, floods, land slides in the mountains
KZN, Mpumalanga, E. Limpopo:	Fire, drought, flash floods, landslides in mountains, tornadoes, lightning, hail
Northern Cape, North West, W Limpopo:	Fire, drought, flash floods, lightning, hail

7. Any 3.  
Know what the hazards are.  
Good regulations [e.g. don't build on a flood plain, no burning fires on windy days]  
Good warning system [radio, TV, sirens (lightning and flash flood warnings)]  
Good response plan, with well trained emergency personnel and equipment.

8. Any 3.  
There must be a good warning system, such as school bells, that works even when the electricity is off.  
There must be an evacuation plan for every room.  
There must be a place where everyone gathers so they can be counted.  
Staff / Teachers must be trained in fire fighting and first aid.  
The phone numbers of local emergency services must be available next to telephones and in places like reception and the staff room.

9. The sick, the very young and the very old are high-risk groups as they need other people to protect them and to help them get to safety.  
The poor, who are often less well educated and live in less well built houses and often in hazard-prone places such as flood plains, are also at high risk. They must be provided with the means to strengthen their defences against hazards.  
In the event of a disaster, they must be included in any plans so that they are not forgotten.