What is happening to our weather?

What is 'extreme' weather? Why are people talking about it these days? 'Extreme' weather is very unusual rain, heat, storms etc. For example, in 2010, 33 centimeters of rain fell in two days on Nashville, USA. According to weather experts, that was a 'once in 1000 years' event. But these days, extreme weather events are more frequent. Also, in 2010, 28 centimeters of rain fell on Rio de Janeiro in 24 hours, and there was record rainfall in Pakistan.

The effects of this kind of rain are dramatic. In Rio de Janeiro, landslides followed the rain. Hundreds of people died. In Pakistan, it caused floods that affected 20 million people. The opposite situation is drought, when no rain falls. Australia, Russia and East Africa have suffered major droughts in the last ten years. Another example of extreme weather is a heat wave, such as in the summer of 2003. In Europe, 35,000 people died from heat-related problems.

So, what is happening? Are these extreme events part of a natural cycle? Are they happening because human activity affects the Earth's climate? The answer, Peter Miller says, is: probably a mixture of both of these things. On the one hand, the most important influences on weather events are natural cycles in the climate. Two of the most famous cycles are called El Niño and La Niña. They start in the Pacific Ocean, but they affect weather all around the world. On the other hand, the Earth's oceans are changing: their temperatures are increasing. And this is a result of human activity. The greenhouse gases we produce mean the atmosphere warms up. Warmer oceans produce more water vapour – think about what happens when you heat a pan of water in your kitchen. Information from satellites tells us that there is four percent more water vapour in the atmosphere than 25 years ago. This warm, wet air turns into rain, storms, hurricanes and typhoons.

Michael Oppenheimer, a climate scientist, says that we need to accept reality. Our weather is changing and we need to act to save lives and money.

Keywords:

drought (n) a long period of time without rain
flood (n) a large amount of water that covers land that is usually dry
heat wave (n) a period of time when the weather is much hotter than usual
landslide (n) a large amount of soil or rock that moves down a mountain
rainfall (n) the amount of rain that falls
typhoon (n) an extremely violent storm of wind or rain, from the South Pacific or Indian Ocean
water vapour (n) water when it is in the form of gas

1.Complete the sentences with words from the Keywords box.
a. We had a _____ last year – the temperature was 35o C for 22 days.
b. Last year it rained for a week and there was a _____ of two metres in my town.
c. A large part of the coast fell into the sea in the _____ .

2. What is 'extreme' weather, according to the text?
a) Weather that occurs frequently
b) Unusual weather conditions like rain, heat, and storms
c) Predictable weather patterns
d) Mild changes in weather over time

3. Why are people talking about extreme weather more frequently nowadays?
a) Because they find it fascinating
b) Because it has become less impactful
c) Because extreme weather events are becoming more frequent
d) Because extreme weather events are becoming less frequent

LIVEWORKSHEETS

4. What was the consequence of the extreme rainfall in Rio de Janeiro mentioned in the text?
a) Drought
b) Landslides
c) Heat wave
d) Earthquakes

5. Which of the following regions has NOT experienced major droughts in the last ten years, according to the text?
a) Australia
b) Russia
c) East Africa
d) North America

6. How many people died from heat-related problems during the European heat wave of 2003?
a) 350
b) 3,500
c) 35,000
d) 350,000

7. According to Peter Miller, what contributes to extreme weather events?
a) Only human activity
b) Only natural cycles
c) Both natural cycles and human activity
d) None of the above

8. Which of the following is NOT mentioned as a natural cycle that influences weather events?
a) El Niño
b) La Niña
c) The Arctic Oscillation
d) The Indian Ocean Dipole

9. How do warmer oceans contribute to extreme weather events, according to the text?
a) They decrease the amount of water vapor in the atmosphere
b) They have no impact on weather patterns
c) They produce more water vapor, leading to rain, storms, hurricanes, and typhoons
d) They cool down the atmosphere, resulting in less rainfall

10. What does Michael Oppenheimer suggest we need to do in response to changing weather patterns?
a) Ignore the changes
b) Accept reality and take action to save lives and money
c) Blame natural cycles for the changes
d) Increase greenhouse gas emissions

11. What is the main message of the text?
a) Extreme weather events are not a cause for concern
b) Human activity has no impact on weather patterns
c) Our weather is changing due to a combination of natural cycles and human activity, and we need to take action
d) Extreme weather events are decreasing in frequency over time

LIVEWORKSHEETS