

Write one important fact from each paragraph in this space.

## Science Shorts -7

### Global Warming - Global Problem

People have been saying that Earth is getting warmer. Are they right? Scientists think so, but not everyone agrees. Studies show that the average temperature on Earth is going up. It is about one degree warmer now than 100 years ago. Earth is expected to warm several more degrees in the next 100 years. Most of this warming has happened in the last 30 years. And, 10 out of the last 15 years were the warmest years of the century. This trend is called global warming and it is causing worldwide problems.

Scientists think an increase in greenhouse gases is a cause for the warming trend. Gases such as carbon dioxide, methane and nitrous oxide collect naturally in the air. They work like the glass roof of a greenhouse. They trap heat near Earth's surface. That is why they are called greenhouse gases. Without greenhouse gases, Earth would be too cold. With too much of them, Earth would be too hot.

Human pollution adds higher amounts of greenhouse gases into the atmosphere. Humans burn fuels, oils and wood. These materials release carbon dioxide. When coal, gas and oil are burned they emit the gas methane. Farms and factories emit the gas nitrous oxide and manufacturing releases ozone gases.

Snow and ice at the poles are melting due to the warmer earth. This is causing sea levels to rise. This might lead to coastal towns being flooded. Polar bears depend on ice fields for their food supply. They hunt seals on the ice in winter. When the ice melts, polar bears live all summer on land without food. Due to global warming, the polar bear's ice is melting too early and they don't get enough food stored for the summer months. It is predicted that by 2050, up to 60 percent of the polar bears' ice may be lost.

What is being done to slow or stop global warming? Since 1997, many countries have worked on a plan called the Kyoto Treaty. The goal is to reduce the use of products and the use of fossil fuels that cause global warming. The countries that agree with the treaty have worked on a plan. But, some countries, like the United States, do not like the plan so they are not following the Kyoto Treaty.

There are several ways people in the United States are trying to help slow global warming. Many people are buying hybrid cars that don't burn as much gas. Other people are installing solar panels in their home to help heat it so they don't use as much electricity. These people are helping by using less energy than they use to.

1. About how much warmer is Earth now compared with 100 years ago?
  - Ⓐ It is the same.
  - Ⓑ It is 1 degree warmer.
  - Ⓒ It is 5 degrees warmer.
  - Ⓓ It is 10 degrees warmer.
  
2. If global warming doesn't stop, how much warmer is Earth supposed to be 100 years from now?
  - Ⓐ 10 degrees
  - Ⓑ 20 degrees
  - Ⓒ 30 degrees
  - Ⓓ several degrees
  
3. How have people made Earth warmer?
  - Ⓐ They have adjusted the amount of sunlight.
  - Ⓑ They have planted more trees.
  - Ⓒ They have released pollution into the air.
  - Ⓓ They have melted the ice at the poles.
  
4. Which group of words best describes some of the different kinds of greenhouse gases?
  - Ⓐ temperature, degrees, warming, and average
  - Ⓑ carbon dioxide, methane, nitrous oxide, and ozone
  - Ⓒ oxygen, carbon dioxide, methane, and ozone
  - Ⓓ coal, gas, oil, and fossil fuels
  
5. The goal of the Kyoto Treaty is to \_\_\_\_\_.
  - Ⓐ reduce the warming trend throughout the world
  - Ⓑ trap greenhouse gases
  - Ⓒ feed the polar bears
  - Ⓓ use coal, gas, and oil
  
6. Greenhouse gases trap \_\_\_\_\_ in Earth's atmosphere.
  - Ⓐ heat
  - Ⓑ cold air
  - Ⓒ carbon dioxide
  - Ⓓ fossil fuels