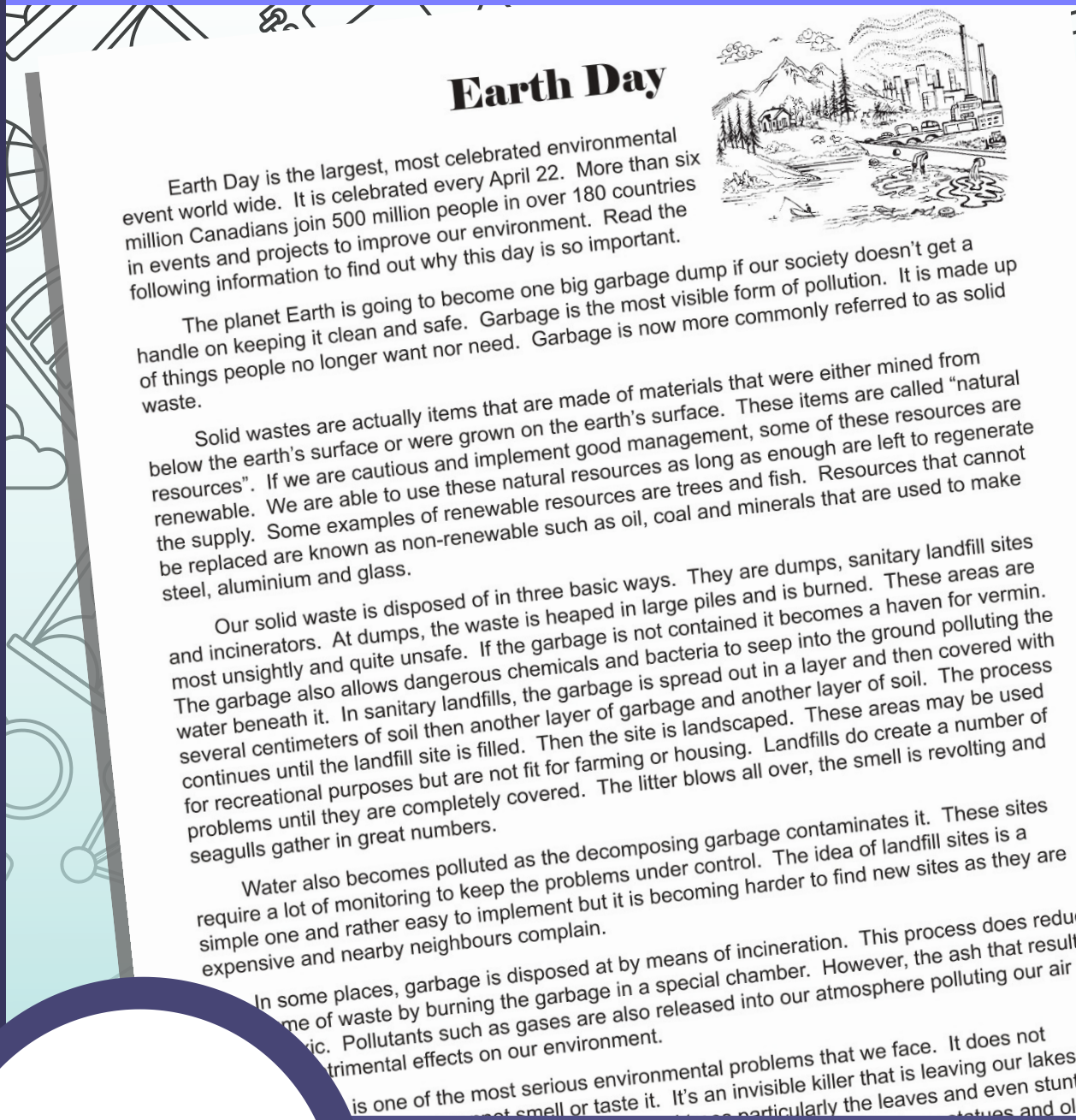
BIG BOOK OF CANADIAN CELEBRATIONS

Earth Day

Information & Worksheets



Earth Day

Earth Day is the largest, most celebrated environmental event world wide. It is celebrated every April 22. More than six million Canadians join 500 million people in over 180 countries in events and projects to improve our environment. Read the following information to find out why this day is so important.

The planet Earth is going to become one big garbage dump if our society doesn't get a handle on keeping it clean and safe. Garbage is the most visible form of pollution. It is made up of things people no longer want nor need. Garbage is now more commonly referred to as solid waste.

Solid wastes are actually items that are made of materials that were either mined from below the earth's surface or were grown on the earth's surface. These items are called "natural resources". If we are cautious and implement good management, some of these resources are renewable. We are able to use these natural resources as long as enough are left to regenerate the supply. Some examples of renewable resources are trees and fish. Resources that cannot be replaced are known as non-renewable such as oil, coal and minerals that are used to make steel, aluminium and glass.

Our solid waste is disposed of in three basic ways. They are dumps, sanitary landfill sites and incinerators. At dumps, the waste is heaped in large piles and is burned. These areas are most unsightly and quite unsafe. If the garbage is not contained it becomes a haven for vermin. The garbage also allows dangerous chemicals and bacteria to seep into the ground polluting the water beneath it. In sanitary landfills, the garbage is spread out in a layer and then covered with several centimeters of soil then another layer of garbage and another layer of soil. The process continues until the landfill site is filled. Then the site is landscaped. These areas may be used for recreational purposes but are not fit for farming or housing. Landfills do create a number of problems until they are completely covered. The litter blows all over, the smell is revolting and seagulls gather in great numbers.

Water also becomes polluted as the decomposing garbage contaminates it. These sites require a lot of monitoring to keep the problems under control. The idea of landfill sites is a simple one and rather easy to implement but it is becoming harder to find new sites as they are expensive and nearby neighbours complain.

In some places, garbage is disposed at by means of incineration. This process does reduce me of waste by burning the garbage in a special chamber. However, the ash that results ic. Pollutants such as gases are also released into our atmosphere polluting our air trimental effects on our environment.

is one of the most serious environmental problems that we face. It does not smell or taste it. It's an invisible killer that is leaving our lakes particularly the leaves and even stunts and old

ON THE MARK PRESS

GRADES 4–6

Earth Day

Earth Day is the largest, most celebrated environmental event world wide. It is celebrated every April 22. More than six million Canadians join 500 million people in over 180 countries in events and projects to improve our environment. Read the following information to find out why this day is so important.

The planet Earth is going to become one big garbage dump if our society doesn't get a handle on keeping it clean and safe. Garbage is the most visible form of pollution. It is made up of things people no longer want nor need. Garbage is now more commonly referred to as solid waste.

Solid wastes are actually items that are made of materials that were either mined from below the earth's surface or were grown on the earth's surface. These items are called "natural resources". If we are cautious and implement good management, some of these resources are renewable. We are able to use these natural resources as long as enough are left to regenerate the supply. Some examples of renewable resources are trees and fish. Resources that cannot be replaced are known as non-renewable such as oil, coal and minerals that are used to make steel, aluminium and glass.

Our solid waste is disposed of in three basic ways. They are dumps, sanitary landfill sites and incinerators. At dumps, the waste is heaped in large piles and is burned. These areas are most unsightly and quite unsafe. If the garbage is not contained it becomes a haven for vermin. The garbage also allows dangerous chemicals and bacteria to seep into the ground polluting the water beneath it. In sanitary landfills, the garbage is spread out in a layer and then covered with several centimeters of soil then another layer of garbage and another layer of soil. The process continues until the landfill site is filled. Then the site is landscaped. These areas may be used for recreational purposes but are not fit for farming or housing. Landfills do create a number of problems until they are completely covered. The litter blows all over, the smell is revolting and seagulls gather in great numbers.

Water also becomes polluted as the decomposing garbage contaminates it. These sites require a lot of monitoring to keep the problems under control. The idea of landfill sites is a simple one and rather easy to implement but it is becoming harder to find new sites as they are expensive and nearby neighbours complain.

In some places, garbage is disposed at by means of incineration. This process does reduce the volume of waste by burning the garbage in a special chamber. However, the ash that results is quite toxic. Pollutants such as gases are also released into our atmosphere polluting our air and have detrimental effects on our environment.

Acid rain is one of the most serious environmental problems that we face. It does not attack our senses as we cannot smell or taste it. It's an invisible killer that is leaving our lakes lifeless and unusable. Acid rain injures plants and trees particularly the leaves and even stunts their growth. Slowly it eats away the metal on vehicles, nibbles away on stone statues and old buildings made from limestone.

Acid rain is caused by gases like the oxides of sulphur and nitrogen which are released into the air by burning fuels like coal. The gases dissolve in the water in the air and fall as acid rain, snow, sleet or hail.

About seventy percent of our planet is covered by water. Water is vital for all living things. Humans have water in each cell of their bodies. The blood in animals and the sap in plants are mostly water. Water is necessary for photosynthesis to take place in plants.

The Earth's water is in oceans, seas, rivers, lakes, ice caps and glaciers. The demand for water is increasing as our population grows. The average household consumes between 1 150 and 1 850 liters of water daily. We are having problems with supply and demand because many of our water sources are now polluted. Waste materials are constantly being discharged into the water systems. Hazardous wastes are often deposited over a long period of time at the bottom of lakes and rivers. Mercury has become a problem because organisms at the bottom absorb the mercury. Small fish eat these organisms, large fish eat the small fish and finally man eats the larger fish. Humans are at the end of the food chain and consequently our health is at risk.

We need to save our water, to keep it clean and healthy so people, plants and animals will always have some to drink. Water is so precious.

Invisible gases surround the Earth. These gases act just like a greenhouse. When the sun shines in, the heat is trapped by the blanket of gases. Too many gases from factories, electric power plants and cars are going into the air. More and more of the sun's heat is being trapped by these new gases causing the "greenhouse effect" or global warming.

The weather, all over the planet, could change if the Earth's temperature gets hotter by just a few degrees. Some places would be too warm to live in. A lot of land could be flooded destroying birds and animals. Places that grow most of our food could get too hot to grow crops and people could eventually die.

There are several gases which contribute to the greenhouse effect. The most important gas is carbon dioxide. When there is too much carbon dioxide in the atmosphere, not enough heat escapes. People are putting too much carbon dioxide in the atmosphere by burning too many fossil fuels such as coal and oil. Methane is a gas which comes mainly from rotting plants and animals. It is found around garbage dumps. Another gas that comes from burning fossil fuels is nitrous oxide. It is made when fertilizer mixes with water. Chlorofluorocarbons (CFC's) are gases that are found in air conditioners and refridgerators as well as in the manufacture of some plastic foam products.

Huge areas of rainforest found in Brazil are being burned down every year in massive fires to make room for land and for cattle. Trees take carbon dioxide out of the air. If millions are destroyed each year carbon dioxide is not being absorbed. The burning of trees is similar to burning fossil fuel which puts large amounts of carbon dioxide into the air. This contributes to global warming or the greenhouse effect. So if we take care of our trees there will be less chance of the Earth warming up.

Earth Day

There are a variety of reasons why "Earth Day" is a yearly celebration. Read the information to find out why there are concerns about the health and welfare of our planet and its inhabitants.

Read the following sentences containing facts about pollution. Look carefully at the underlined words. From the list in the box, choose a word that means the same or nearly the same and record it on the line provided.

1. Natural **pollutants** in the air include dust, pollen and soil particles. _____
2. Artificially created wastes are the main sources of air pollution. _____
3. Polluted air can be **dangerous** to the health of people as well as plants and animals. _____
4. The **damage** caused a great deal of pollution in many cities. _____
5. Automobiles **produce** a great deal of pollution in many cities. _____
6. Cars cause problems because they run on fuels that are **nonrenewable**. _____
7. Furnaces in buildings cause **contamination** in large cities. _____
8. Metals, concrete and rubber **deteriorate** faster because of air pollution. _____
9. When a volcano **erupts** it can put smoke and gases into the air causing pollution. _____
10. The government is **researching** pollution problems to help save the earth. _____
11. Kids can speak up and spread the word to friends, classmates and adults before it's too late. In this way, they will be **accomplishing** something important. _____

causes	impurities	pollution
doing	investigating	weaken
explodes	irreplaceable	yield
harmful	loss	

Earth Day:

1. impurities **2.** causes **3.** harmful
4. loss **5.** produce **6.** irreplaceable
7. pollution **8.** weaken **9.** explodes
10. investigating **11.** doing