Teacher's Note
Water….. Salty or Fresh?

Water covers nearly 75% of the earth. When we think of water, we think of rain, lakes and rivers because they are parts of our daily lives. Water is also found in the atmosphere, underground, in snow, ice, seas and oceans. It is in constant motion and recycles itself through the Water Cycle.

Most of the earth's water is salty or permanently frozen. **95.1% of water on earth is estimated to be salt water. Fresh water total only 4.9% of all water on earth.** Fresh water is found in ice, lakes, rivers, streams and underground. **0.01% of earth's water is found in rivers and lakes.**

Humans need water to live. The most common sources of drinking water come from groundwater (wells), lakes, rivers and streams. Having such limited amounts, it is ironic that we continually pollute and misuse this vital life line.

Cities and towns throughout the world have always developed near a water source. As population and economic activities increased, inefficient water use practices were and are being used. The swift rate of industrial development in the last century has isolated and removed citizens from their water sources. Lake harbors are often industrialized, local rivers and streams are unpleasant and polluted and groundwater is not visible because it is located underground. It is not surprising to find that many people do not know where their drinking water comes from. Water conservation and protection are challenges faced by all rural and urban communities on earth.

A large part of the Greater Toronto Area (GTA) relies on water from Lake Ontario for their drinking supplies. All the water that leaves the GTA homes, as well as rain water that runs off lawns and roads, returns into Lake Ontario. Areas outside of the GTA use groundwater, which is obtained, from local wells. These include Regions such as Waterloo, Wellington and parts on north Peel, to mention a few. In total, 26% of Canadians rely on groundwater for their drinking supplies.

Water is an active part our daily lives (bathing, cooking, cleaning, etc.), yet we take it for granted everyday. Did you know that one drop of car oil will make 25 litres of water unfit for drinking? It is important to have awareness of water's limited availability and realize the impact that daily actions can have on local water quality. Each one of us has the responsibility of protecting and conserving water, a little care goes a long way. **Clean Water – Life Depends on It!**

Sources: Clean Water Life Depends On It! Freshwater Series A-3. Environment Canada. Ottawa. 1992.
Water Conservation – Every Drop Counts. Freshwater Series A-6. Environment Canada. Ottawa. 1992.
Water – Here, There Everywhere. Freshwater Series A-2. Environment Canada. Ottawa. 1992.

Water….. Salty or Fresh? Activity Sheet 2

1a) If the earth would be split into 100 parts with 25 parts covered with land, how many parts of the earth's surface would be covered with water?

1b) This circle represents earth if it were split into 4 equal parts. Colour the land parts brown. Colour the water parts blue. Make sure it agrees with your answer in the last question.

(Draw a circle)

2a) If all the water on earth was placed into 100 glasses, 95 glasses would be salt water. How many glasses would be fresh water?

2b) If all the water on earth was divided into 10 water holding tanks, how many of the holing tanks would hold salt water? Illustrate your results by shading the appropriate number of circles.

(*Insert 10 small circles*)

3. Salt water is found in the oceans and seas. Can you think of places where we find fresh water?

a) _____ b) _____

c) _____ d) _____

e) _____ f) _____

4. Almost all freshwater on earth is found in groundwater.

a) Where can we find groundwater?

_____

_____

b) How do people get groundwater to their homes?

_____

_____

5 a) Name 4 living creatures that need fresh water to survive.

1) _____ 2) _____

3) _____ 4) _____

b) Name 2 living creatures that need salt water to survive.

1) _____ 2) _____

Worksheet: ***Renewable and Nonrenewable Resources***

Student: _____

Directions: Each material or item on this list is a renewable or nonrenewable natural resource or is produced directly from a renewable or nonrenewable natural resource. For each item mark whether it is, or is made from, a "renewable natural resource" (RNR) or a "nonrenewable natural resource" (NNR).

_____ **Water** 

_____ **Coal**

_____ **Oil** 

_____ **Trees** 

_____ **Wind**

_____ **Plastics**

_____ **Bauxite (Aluminum)**

_____ **Natural Gas**

_____ **Ice Cubes** 

_____ **Sunlight** 

_____ **Salt Water**

_____ **Gold Jewelry** 

_____ **Lumber**

_____ **Iron**

_____ **Paper**

_____ **Soda Can**