



Beaver Scout Meeting Schedule

Theme: World Scout Environment Programme – Harmful Substances

Objective: To help Beaver Scouts understand the impact of harmful substances on our Earth, and investigate ways that we can reduce this impact.

Time	Activity	Program Details	Leader Responsible
5 mins	Gathering Activity	Water Pollution Tag	
5 mins	Opening Ceremony		
10 mins	Game	Catch the Carbon Dioxide	
15 mins	Theme Activity	Plastic Scavenger Hunt	
15 mins	Story	<i>The Lorax</i> (Dr. Seuss)	
10 mins	Lodge Meeting		
5 mins	Spiritual Fellowship		
5 mins	Closing Ceremony		
15 mins	Leader Discussion Time		

Meeting Notes: _____

Beaver Scout Meeting – Detail Planning

Introduction

Harmful substances are all around us. We use potentially harmful substances in our everyday lives – to clean our houses, and drive our cars, for example. There can be pollution in the air, in the water, and in the soil. It is important for youth to understand the risk and potential impact of harmful substances on the environment, and to work to minimize this risk to people, plants, and animals.

For example, phosphates from detergents can enter the water system when they are used to wash clothes. These phosphates can cause algae and weeds to grow very quickly in surface water, which can choke the waterway and use up precious oxygen, which can result in the death of important fish and aquatic organisms.

Similarly, oil spills in the ocean can also cause fish and aquatic organisms to smother or become poisoned. Oil spills also affect important habitat areas.

Objects that have been disposed of in landfills can also cause toxic leachate that can adversely affect animals, water systems, and habitats.

Greenhouse gases enter the atmosphere through human activities, decay and decomposition, large-scale livestock operations and so on. These can cause air pollution and climate change, which has an enormous potential to affect the environment, as well as the future of the Earth itself.

As we have seen in the other sections of the World Scout Environment Programme, *Clean Air*, *Clean Water*, and *Natural Habitats*, pollution can come from many sources. There are also many ways that we can work to reduce pollution. This Jumpstart will help your section think about ways that they can help to protect the environment.

Gathering Activity

Water Pollution Tag

Objective:

A wide game that allows children to understand the spread of water pollution.

Background Information:

This game is played using cards that list different sources of water pollution. This can be classified as *point* sources and *non-point* sources. Point sources are those that put pollution directly into the water supply (oil spill), while non-point sources are those that may wash off a road or a field with the rain or snow (oil leakage from vehicles).

Equipment:

- A large, defined playing space.
- Sources of water pollution cards

Instructions:

One person is the “Water Supply,” and three or four others are the “Water Treatment System.” These players surround the water supply and protect him/her. The rest of the players are “Pollution,” and have to try to get through the water treatment system in order to pollute the water supply.

A leader will hand out cards with different sources of water pollution to the players who are “Pollution.” The members of the “Water Treatment System” must stay at least 3 metres away from the person who is the “Water Supply.” They will keep the “Pollution” away by tagging them with a two-handed touch. If a person who is “Pollution” is tagged, they must hand over their card to the person who tagged them. This connotes that the water treatment system has been successful in keeping the pollution out of the water supply. If a “Pollution” player is tagged by a member of the “Water Treatment System,” they go back to their leader and get another card to try again.

If a “Pollution” player gets through to the “Water Supply,” they will hand their card to that person, signifying that the water treatment system was unsuccessful in keeping that pollutant out of the supply.

When all the cards have been handed out, check to see if there are more cards with the “Water Treatment System” players or with the “Water Supply” player. This will tell you whether “Pollution” has won or not!

Please note: if you have a large group, consider making two sets of cards to pass out

HOUSEHOLD PAINT	OIL SPILL
HOUSEHOLD CLEANERS	SEWAGE
DETERGENT	UNDERGROUND STORAGE LEAKAGE
FERTILIZER	INDUSTRIAL WASTE
ANIMAL WASTES	GARBAGE

RADIOACTIVE WASTE	ROAD SALTS
PESTICIDES	SEPTIC SYSTEMS
SEDIMENTS	GASOLINE
ANTIFREEZE	OIL LEAKAGE FROM CARS

Game

Catch the Carbon Dioxide

Objective:

To learn about the basic science behind Climate Change.

Background Information:

Our planet is surrounded by a layer of gases, which is called the atmosphere. As the sun shines on the Earth it sends heat to the surface. Some of this is absorbed by the Earth's surface and some of it bounces back into the atmosphere. The reflected heat is trapped by the atmosphere and this keeps the planet warm. This is known as the greenhouse effect. This is actually a beneficial aspect of the atmosphere, however, the greenhouse effect is being amplified by the input of greenhouse gases from human activities.

The layer of gases is getting thicker as burning fossil fuels for energy releases carbon dioxide into the atmosphere, and forests are cut down for timber and agriculture. The most important greenhouse gases are carbon dioxide, methane and nitrous oxide. As the layer of gases gets thicker, the temperature of the Earth also rises. As a result of this, the Earth's climate is starting to change.

Equipment:

- Blindfolds
- A large, defined playing area

Instructions:

Split the group into two, uneven teams. The team with more people should be "Carbon Dioxide" molecules and the team with less people should be "Trees." Ask the "Trees" to find a place to grow, with plenty of space between each "Tree." Once the "Trees" are planted firmly, they can use only their hands and arms (their "branches" and "leaves") to catch Carbon Dioxide molecules.

Blindfold the players who are acting as "Carbon Dioxide" molecules will be floating through air. They can move fast, but they can not see where they are going. The Carbon Dioxide players must try to move from one side of the playing area to the other, without getting caught.

If they are caught, they become "Trees" and must take off their blindfolds, find a place to "plant" and start catching Carbon Dioxide.

Play until almost all of the Carbon Dioxide is gone, and then announce that humans have found this forest and have decided to cut down the trees for timber. The area is then used to found a new shopping centre, which lots of people drive to, putting carbon dioxide into the air.

Choose three quarters of the "Trees" to become "Carbon Dioxide" molecules, and play again.

Other scenarios could include:

A Scoutree project takes place – turn half of the "Carbon Dioxide" molecules into "Trees."

Theme Activity

Plastic Scavenger Hunt

Objective:

Beavers will begin to understand how much plastic we use in our everyday lives.

Background Information:

There are seven different kinds of plastics. These plastics are used for a multitude of purposes, ranging from toys to dishes to boats, parts of cars, shopping bags, and so on. Most plastic is recyclable in most areas, but certain numbers of plastic, such as #6 (polystyrene or Styrofoam) can be more difficult to recycle. Check with your local recycling facility to determine what is accepted for recycling in your area. Although most plastics are technically recyclable, not all plastics are in demand for recycling by manufacturers.

The manufacture of plastics can release harmful toxins into the air and water. When some plastics are heated, they can leach harmful chemicals. For example, it can be dangerous to cook with #3 PVC plastic, however, #5 PP plastic is considered “food safe.”



#1 – PET or PETE (Polyethylene Terephthalate). Used for water and soft drink bottles, etc. Can be recycled into carpet or polar fleece clothing.



#2 – HDPE (High Density Polyethylene). Used for milk jugs, shampoo bottles, etc. Can be recycled into oil bottles, pens, drainage pipes.



#3 – V or PVC (Polyvinyl Chloride). Used for cooking oil bottles, siding, pipes, etc. Can be recycled into decks, paneling, etc.



#4 – LDPE (Low Density Polyethylene). Used for squeezable bottles, bread bags, etc. Can be recycled into garbage cans, compost bins, etc.



#5 – PP (Polypropylene). Used for yogurt containers, syrup bottles, straws. Can be recycled into signal lights, bicycle racks, ice scrapers.



#6 – PS (Polystyrene). Used for egg cartons, disposable cups and plates, meat trays. Can be recycled into insulation, egg cartons, take-out food containers.



#7 – OTHER (Miscellaneous). Used for water jugs, sunglasses, DVDs, computer cases, sunglasses. Can be recycled into plastic lumber, some custom made products.

Equipment:

- Plastic Scavenger Hunt worksheet
- Examples of different kinds of plastics (as many of the different kinds as possible)

Instructions:

Talk to your Beaver Scouts about plastics, showing them the examples of different kinds of plastics. Ask them to think about the various types of plastics that we use in our everyday lives. Ask them to look at their outfits – is there any plastic? Have them look around the room – what different kinds of plastic do they see?

Plastic Scavenger Hunt

When you had breakfast this morning, did you use any plastic? What kind of plastic did you use?

Look at your clothes – including your shoes. Are you wearing any plastic? Where?

Look around the meeting area – is there any plastic? What can you find?

How much plastic can you find? Count each piece of plastic and write the number below.

How much plastic is in your meeting area? What do you think about this?

Think about the things that the plastic is being used for – what would life be like without plastic?

Story

The Lorax, by Dr. Seuss

Objective:

To better understand the potential that human activities, needs and wants, may have on our environment. Each action that we take has a corresponding effect, which the story explains through the actions of the Once-ler.

Instructions:

Read the story to the Beaver Scouts, making sure to stop after each action of the Once-ler, to discuss what is happening and how it affects the environment. Talk about the actions of the Lorax, who tries to persuade the Once-ler that he is destroying the environment and affecting the animals that live there.

Possible questions:

- Why does the Once-ler keep making Thneeds?
- Why do the animals leave?
- What happens to the environment?
- Is this a place that you'd like to live?
- How would you feel if you were the Lorax?
- Where do you think that the Lorax goes?
- How would you feel if you were the Once-ler, at the end of the story?
- What would you do if you were given the Truffula seed?
- What lessons can we learn from this story?

Alternate Activities

Homemade Bath Salts

This is a good craft for Mother's Day.

Equipment:

- Epsom salts
- Pickling or coarse salt
- Essential oils
- Food colouring (optional)
- Large mixing bowl
- Wooden spoon, for mixing
- Jars or containers to hold the finished product (could use recycled containers such as baby food jars, decorated appropriately for the occasion)

Instructions:

Using a ratio of 1 part Epsom salts to 3 parts pickling/coarse salts, mix together in a large bowl. Add in drops of essential oil, until scent is as strong as desired. Add food coloring, if desired.

Pour into container and close tightly.

Theme Activities

- Take a tour of a waste-water treatment centre.
- Take a tour of a recycling depot or landfill site.