

# SCOUT MEETING SCHEDULE : Week 2

# **Theme: Recycling and Climate Change**

# Date:

Time	Activity	Program Details	Leader Responsible
15 mins	Gathering Activity Garbage Bag Challenge		
10 mins	Opening Ceremony		
20 mins	Game Secret Code		
20 mins	Theme Activity Garbage Interpreter		
30 mins	Theme Activity Commercial Break		
15 mins.	Patrol/Troop Meeting <ul> <li>Commuter Challenge</li> <li>Climate Change Crest</li> </ul>		
5 mins	Closing Ceremony		
15 mins	Leader Discussion Time		

Meeting Notes:



# SCOUT MEETING SCHEDULE CLIMATE CHANGE: WEEK 2 Theme: Recycling and Climate Change

**Introduction:** Recycling materials helps to address climate change. This is because recycling reduces our dependence on virgin materials which require large amounts of energy to locate, extract and process. Far less energy is used to reuse material than to generate it from raw resources. Recycling is only one of the 4 "Rs" that contribute to reducing greenhouse gases; reducing, reusing and refusing are also important aspects of tackling climate change.

*Objective:* To teach Scouts about recycling and its link to climate change, as well as the concepts of reducing, reusing and refusing.

# **GATHERING ACTIVITY**

## Garbage Bag Challenge

### **Objective:**

To find out what materials can be recycled and how.

## Equipment:

- One bag of "garbage" per patrol. This should include:
  - clean garbage items (things that cannot be recycled)
  - items which can be recycled in blue and black boxes (including multi-material items such as cereal boxes with inner plastic bags left in them)
  - reusable items (wrapping paper, cups, plates, items which would be used for craft supplies such as scrap paper, string, etc.)
  - clothing which could be used as rags or donated to charity/second hand stores
  - items which could be reused in other ways such as shoes which could be resoled, tires which could be patched, etc.
  - items like flyers, bulky packaging which could be "refused"
  - where community "take it back" programs exist, include acceptable items such as batteries, electronic parts, etc.
- An overview of what your municipality accepts for recycling (available on a web site or through communication with the municipality).

### Instructions:

- 1. Give each patrol a bag of "garbage". Explain that the object of the game is to make your bag of "garbage" as small as possible in a set amount of time. This is done by pulling things out of the bag that could be used or disposed of in a different way. Do not have a common place for items to be "disposed" if Scouts try to recycle something that your municipality does not accept, it will have to go back into their garbage bag and count against the end size of their bag.
- 2. Give Scouts two minutes to sort through their bags and pull out items that should not go to a landfill.
- 3. Each patrol explains why they removed certain items from their bags. Give extra credit for articles which could be reduced (in future purchases such as buying in bulk) and refused (refusing flyers, extra packaging, etc.).
- 4. Ultimately, the team with the smallest bag of garbage at the end of the game wins.



## GAME Secret Code

### **Objective:**

To discover how much energy can be saved by using recycled material versus raw material to generate new products.

## Equipment:

- One of each for each group playing: aluminum can, piece of paper, piece of plastic, piece of steel, glass bottle. (Alternatively, create large cards with the names of each material above written on them.)
- One piece of paper and pen/pencil per team
- One person to volunteer to be the Code Master.

### Instructions:

- 1. Give each patrol a bag containing the five objects, but do not let them open it to look inside. Each patrol selects a "Messenger".
- 2. Tell Scouts that they have been locked in a chamber room with only five minutes to escape before the building will collapse. The door of the chamber has been locked by a secret code. There are no windows or other doors in the room. The only escape is to break the code to open the chamber door.
- 3. The code can be broken by lining up the objects in the bag in a special order. Each of the objects can be made from recycled materials. However, not each of them save as much energy as the others when they are made from recycled material versus new material. Patrols must line up the objects in the bag in the order in which they save energy when made from recycled materials. The item made from recycled material which saves the most energy should be first, continuing to that which saves the least.
- 4. There is one additional piece of information; patrols can approach the Code Master up to three times with their answer over the course of the game. Only one patrol member (the Messenger) can approach the Code Master with the patrol's guess. The Code Master can only tell you how many items are in the right order, but not which items are in the right order.
- 5. The first team to crack the code and open the door wins.

### Answer:

The end order (from most energy savings to least energy savings) should be:

Aluminum (saves ~95% energy) Plastic (saves ~75% energy) Steel (saves ~64% energy) Paper (saves ~60% energy) Glass (saves ~40% energy)

(Figures vary slightly based on different studies. These were collected and compared from a variety of sources, including: http://www.epa.gov/epaoswer/non-hw/recycle/benefits.pdf; http://www.eere.energy.gov/erec/fact-sheets/savenrgy.html; and www.umass.edu/recycle/environmental\_benefits.html.)

### Discussion:

Were Scouts surprised at how much energy could be saved by making new items out of recycled material? Why is it important to save energy when making these items (i.e. energy can be used for other purposes, reduces greenhouse gases which contribute to climate change)? What items make the biggest impact in reducing greenhouse gases (pop cans, paper and cardboard, plastic containers)?



Notes on energy saved by the various recyclables:

Reusing materials reduces the energy and resources required to extract, refine, transport and process virgin natural resources. Some materials are more energy intensive than others to manufacture from raw resources. Resource extraction is energy intensive. The process is environmentally polluting, creating a lot of mining and processing waste which also must be disposed. The process of recycling materials - collection, processing and transportation - although uses energy, eliminates the very energy intensive activities required for making items from raw materials. Some materials such as aluminum and glass can be recycled and reused an infinite number of times. In addition, by recycling paper products, fewer trees will be cut down. Trees play a valuable role in absorbing greenhouse gases (which trigger climate change) and regulating our climate. Leaving more of them standing is good for our air and climate.

## THEME ACTIVITY

#### **Garbage Interpreter**

#### **Objective:**

To help Scouts use detective skills, while learning to 'interpret' litter. Garbage can actually tell an interesting story. This encourages Scouts to think about how much garbage they produce and what its end fate is.

#### Equipment:

• Rubber gloves for each member.

#### Instructions:

- 1. While wearing the gloves, each Scout collects three pieces of litter from the ground near the meeting area, a local park, school grounds, etc. Tell the Scouts that they'll use the litter for the next activity, but give no more information. It will build suspense!
- 2. When they return, each patrol spreads their litter out on the floor. Tell the Scouts that they are space scientists who have just landed on a strange new planet. The planet is shrouded in impenetrable darkness; further observation or exploration is impossible due to the darkness. Robots from the spaceship have scanned the entire area and returned carrying only the items before them. These objects prove that life exists on the planet, but what type of life is unknown.
- 3. Using only the information that the litter provides, draw as many conclusions about this planet's life forms as possible. What do the inhabitants look like? What do they eat and drink? Where do they live? Do they have eyes? How intelligent are they? For example, if the alien space scientists find a pop can, the discovery could lead to many logical deductions and questions, including: What types of metals are used and produced on the planet? What shape of hands do the planet's creatures have? What types of tools do the creatures use to open cans? Make sure the Scouts use their imaginations. It's okay to form conclusions or deductions that are logical, yet known to be false. (Everyone should think of one or two of these.)
- 4. Once the Scouts have finished, they present their conclusions to the troop. Each patrol should choose their funniest and/or most logical conclusion.
- 5. What would archaeologists think about our garbage 5000 years from now? Would they respect us or hold us in contempt because of our garbage?



## THEME ACTIVITY Commercial Break

#### Equipment:

- A number of recyclable products
- Scissors, string (a good way to test knots), duct tape and glue.

#### Instructions:

- 1. Patrols are given a number of recyclable products which they must put together in some fashion to create a "new" object (these items could be the ones from their "garbage bags" in the first game).
- 2. Patrols must create a sales pitch for their product to try to convince other patrols to buy it.
- 3. Encourage teams to adopt sales pitches that promote the energy savings benefits of the object (examples could be: it is made of recycled material, is powered by humans, it is handmade instead of machine made, it helps you to do more things with less energy, etc.).

## PATROL/TROOP MEETING

#### **Commuter Challenge**

#### **Objective:**

- 1. Each patrol tallies up their results: how many kilometres did the patrol replace by using a less energy intensive mode of travel? How many did the entire troop replace? What were the benefits of changing the way they travelled (faster? less expensive? more enjoyable? physical benefits? environmental benefits such as reduced air pollution and climate change? etc.). How difficult was it to replace the way they travelled?
- 2. Challenge Scouts to complete the transportation challenge component of the Climate Change Crest (see crest requirements for more details at www.scouts.ca, Climate Change).

### **Climate Change Crest Activity**

Review what Scouts have learned about recycling, particularly the extent of items that can be recycled and the relative energy savings.

Scouts can make a plan to start or expand the recycling program at their house or grandparents'/relatives' houses. Ask them to get involved and play an active role in introducing, promoting and implementing the program. They should find at least two ways that they can expand their current recycling program to include items they have not been recycling (e.g. clothing, computer parts, non-rewriteable CDs, resoling shoes, refusing flyers and junk mail, buying food/items in bulk, buying food and other products with reusable, recyclable or reduced packaging, etc.).