SCOUT MEETING SCHEDULE : Week 1

Theme: What is Climate Change?

Date:

Time	*Activity*	*Program Details*	*Leader Responsible*
10 mins	Gathering Activity Energy Tag		
10 mins	Opening Ceremony		
15 mins	Game How Much Energy Does it Take to Eat?		
30 mins	Theme Activity Energy Trackers		
10 mins	Theme Activity Commuter Challenge		
20 mins	Game Multi-mode relay race		
15 mins.	Patrol/Troop Meeting Home Energy audit		
10 mins	Closing Ceremony		
15 mins	Leader Discussion Time		
Meeting Notes:	Scouts need to come prepared for the meeting with: • a piece of food packaging • a compass • a form of transportation complete with safety equipment (bike, skateboard, in-line skates, etc.)		

SCOUT MEETING SCHEDULE
CLIMATE CHANGE: WEEK 1
Theme: What is Climate Change?

Introduction: Energy use is intrinsically linked to climate change. Most Canadians use "fossil fuels" to heat their homes, generate electricity and run their cars. Fossil fuels are the main culprits creating the accumulation of greenhouse gases in the atmosphere which are triggering climate change. By using energy wisely and conserving it as much as possible, individual Canadians become a solution in the fight against climate change

Objective: To introduce Scouts to climate change and energy use, as well as the link between the two concepts. Scouts will learn how energy is used and lost in their homes and through their daily activities so as to enable them to conduct a Home Energy Audit.

GATHERING ACTIVITY
Energy Tag

Objective:

To test Scouts' knowledge about energy use.

Equipment:

- Set of True and False questions (see page 6)
- Large playing area indoors or outside

Instructions:

1. Arrange Scouts into two teams (named "True" and "False"). Line the teams opposite each other approximately one to two metres apart. Fifteen metres behind each team is a "safety zone."
2. Explain that a leader will read out a question regarding renewable energy to test their knowledge. The answer will either be True or False.
3. If the answer is true, the "False" team races to their safety zone. The "True" team chases them. Anyone who is caught before reaching the safety zone joins the other team. If the answer is false, the opposite happens.
4. Continue until all the questions have been asked or all the Scouts belong to one team.

GAME
How Much Energy Does it Take to Eat?

Objective:

To help Scouts understand how their food selections can contribute to climate change. This activity is ideal to tie in with planning a menu for a camping trip. The end objective would be to reduce the greenhouse gas contribution of food items selected as part of the camping menu.

Instructions:

1. Ask each Scout to bring in one piece of packaging from a food item (e.g. chocolate bar wrappers, pop cans, cereal boxes, fruit with country of origin stickers, etc.). Each Scout tells the group where their item originated. Whose item was transported from the furthest away? The closest? How would each item have travelled to the store from which they bought it? Which item probably created the most greenhouse gases, based on distance and likely mode of transport (air transport is the most greenhouse gas intensive)? Bring in a map of the world and have Scouts place pins, stickers or marks on the map to represent where their product originated.

2. Tell Scouts that the average meal has traveled 2,500 kilometres before it reaches their plate. Ask Scouts to guess how far that is by comparing it to a distance between their city/town and another location. Demonstrate the distance by tracing it on a map. Why is that? What is wrong with that (one transport truck shipment of food creates as many greenhouse gases (GHGs) as one person does in a whole year)?
3. What impact would buying local products have on energy conservation?
4. Ask Scouts to take this into consideration as they plan the menu for an upcoming camping trip. How can they plan a menu around foods that are locally produced or non-energy intensive? Don't forget to think about packaging; where possible buy in bulk rather than individual servings, buy local produce in season, etc.

THEME ACTIVITY

Energy Trackers

This game is best done on a cold day in winter. Leaders should evaluate the meeting building/rooms to ensure that doors and windows are not draft-tight, or the game will not work.

Objective:

To introduce and prepare Scouts to perform a home energy audit. They will learn some of the ways in which a home can waste energy.

Equipment:

- Pencil and paper for each patrol (if patrols are making up their own orienteering courses) OR prepared orienteering instructions
- The week before, ask Scouts to bring their compass to this meeting.

Instructions:

1. Before the meeting, create separate orienteering courses for each patrol or group of four. Course should be challenging enough to test orienteering skills and based on a set of directions (e.g. walk five paces 30º) or distance estimations (walk 30º for 3 metres). There are many variations for this activity. For example, you could provide all directions up front, or have the first instruction lead to the second that is hidden somewhere along the course. Alternatively, each patrol or group of four Scouts creates a challenging orienteering course to a set destination for another patrol to follow.
2. End destination should be an item that has the potential to leak energy, such as an outside window, outside door, fridge, an electrical outlet on an outside-facing wall, an empty room with a light left on, or an appliance kept on standby or "sleep mode" (stereo, computer).

   Hint: It would be best to test in advance of the meeting which windows and doors have the most significant drafts and lead patrols to these destinations.
3. If instructions are given one by one (i.e. the first orienteering instruction leads to the second, etc.), place a piece of paper with a different climate change "impact" at one point along the course together with the next instruction. It doesn't matter where along the course this is done, as long as it is before the patrol reaches their final destination. Alternatively, if all instructions are given up front, provide pieces of paper with climate change impacts to Scouts at the beginning or end of the exercise to retain until the end of the activity. Examples of impacts include: forest fires, hotter summers, melting glacier ice caps, drier rivers, floods, droughts, insect infestations, habitat loss, or outbreaks of disease.
4. Once orientation courses have been created, distribute a set of orienteering instructions to each patrol or group. Explain that the building has become infested with energy robbers. Each orienteering course leads to a specific energy robber. Patrols must work together to find the robber by following the orienteering course. If relevant, explain that groups will come across a word together with their instructions at one point along the course (alternatively, hand the word out to groups now). They are to save that word until the end. The challenge will be to describe the link between the word and the energy robber. Do not tell them that the word they will find relates to a climate change impact. (It is anticipated that Scouts will not know the link between the climate change impact and the "energy robber". This serves to fuel discussion after the game and make the link to climate change).

5. Scouts proceed to follow their orienteering courses. Explain to them that the last clue leads them to their robber. They must identify what the robber is and why it robs energy.
6. The first group or patrol back to the headquarters and correctly report their answer, wins the game.

Discussion:

Each patrol/group should report back on what their "energy robber" was and how it robs energy. Ask why it is important to identify energy robbers in a building (to save/conserve energy, to reduce air pollution, to reduce greenhouse gas emissions that cause climate change, to save money on energy bills, etc.). Then ask groups/patrols to read out the word that was hidden along their orienteering course. What is the relationship between the word and the energy robber? For example, wasting energy through drafts in the building adds to climate change. This is because extra energy is used to heat the house than if it was air tight. The words all explain negative impacts from climate change caused by things such as wasting home/building heating.

THEME ACTIVITY

Commuter Challenge

Objective:

To help Scouts understand the link between their transportation related activities and climate change, and to encourage them to rethink how they commute to various activities. Option: See if a Venturer company or Rover crew in your area would take on the challenge of leading this activity.

Background Information:

Carbon dioxide is one of the most prevalent greenhouse gases. It is also a gas that is necessary for photosynthesis. During this process, plants and trees absorb carbon dioxide and give off oxygen. Trees can absorb a significant amount of carbon dioxide during their lifetime and therefore are important to reducing climate change.

Equipment:

- One Commuter Challenge survey and tally sheet per Scout (see page 7).
- A note for parents to explain the activity (if required).

Instructions:

1. Register for the Commuter Challenge: http://www.commuterchallenge.ca or start your own challenge using the form on page 8.
2. During the meeting, ask Scouts to list all the different modes of transportation they can think of (car, carpool, bus, train, plane, walking, biking, in-line skating, skateboarding, etc.). Determine the relative energy use of each of these modes of transportation. Which use the most energy? Which use the least? Which contributes the most to climate change? Which contributes the least (planes are the worst, human powered transport is the best)?

3. Provide each Scout with a copy of the Commuter Challenge survey and tally sheet (available from http://www.commuterchallenge.ca or use the one on page 8). Invite Scouts to take up the challenge themselves, and involve their families in the challenge. Go over the instructions for filling in and submitting the tally forms. Describe what information they need to ask their families and when they need to have the information completed.

GAME
Multi-Mode Relay Race

Objective:

To demonstrate in a fun way that multiple modes of transportation can be used to reach a destination. This game is best played outside and requires equipment to be brought in for each team. It is suggested that each Scout bring in their own equipment and safety gear. Alternatively, play in the winter with a focus on winter modes of transport (sleds, skis, snowshoes, etc.).

Equipment:

- Equipment for several modes of transportation. Each team will require one of each mode, such as bikes and in-line skates with safety gear.
- One cut out cardboard picture of a bus (approx. 1 metre long, ½ metre high)
- Scouts should come dressed for physical activity with proper footwear
- One knapsack per team stuffed with newspaper/clothes/other filler material
- Markers for each mode-change station.

Instructions:

1. Set up a course with different stations where modes of transportation will be switched. The course could span across a neighbourhood, park or field. For example, start by biking to a designated station, running to the next, taking the "bus" to the following station, walking to a fourth station, in-line skating to a fifth, etc. Transportation modes can be repeated as desired.
2. Each member on each team selects a transportation mode and station. Have all necessary equipment at the station with each Scout.
3. Give the backpack to the person at the starting station.
4. Signal the relay to begin. If, for instance, biking was the first mode of transportation, the Scout races to put on safety gear and backpack, get on the bike and reach the next station as fast as he/she can. Once reaching the station, he/she will take off the backpack and pass it to the next Scout on the team. He/she then puts on the backpack and any gear related to their mode of transportation and continues on to the next station.
5. Continue the race until the last Scout from the last station reaches the finish line. First there wins for their team.

Discussion:

What did all the modes of transportation have in common? (They are good options to reduce air pollution and climate change.)

What are the benefits/drawbacks of each one? (Biking is fast, but there must be a place to lock up your bike; running is good exercise but makes you sweaty, etc.)

Ask Scouts to think of all the places they go to during the week in the car.

Could they use one of the modes in the relay instead of the car?

How hard would it be to switch?

PATROL/TROOP MEETING
Home Energy Audit

Review what the Scouts have learned about energy use and climate change. Supply Scouts with a copy of the Scout Home Energy Audit found on Scouts Canada's web site, www.scouts.ca. Click on Scouts, then select Climate Change to find it. Challenge them to make a commitment to complete it within two week's time.

Energy Tag – Questions & Answers

1. You should only turn off lights whenever you leave the room for more than ten minutes.
   FALSE: You should turn off lights even if you leave for less than ten minutes – anything over five minutes can save valuable energy.
2. Letting the computer go into "sleep mode" uses the same amount of energy as turning it off.
   FALSE: You should completely turn off all equipment such as computers, stereos, etc. when they are not in use. The "sleep mode" still uses energy.
3. When you are cold, you should put on a sweater rather than turning up the heat in your home.
   TRUE: Turning up the temperature is expensive and wasteful. Use a sweater, blanket or slippers to keep warm on very cold days or when you are doing something inactive such as reading or doing homework.
4. In the summer, you should always keep your curtains and windows open to allow sunlight into the house.
   FALSE: In the summer, close curtains and windows during the day to keep the sun's heat out of your house and keep your home cooler.
5. One of the best ways to use energy efficiently in your car is to keep your tires properly pumped up.
   TRUE: Keeping your car tires pumped up helps your car to perform better and reduces the amount of energy it needs to drive.
6. The best time to use equipment like a dishwasher, laundry machine or dryer is in the middle of the day.
   FALSE: The largest demand for energy is during the day. This makes it hard to meet all energy demands and can create blackouts. Use of dishwashers, laundry machines or dryers at night helps ensure there is enough energy to go around.
7. A microwave uses less energy than the stove.
   TRUE: Energy is lost into the air when the stove top is used to cook. A microwave uses less energy over a shorter period of time. This makes it more energy efficient.
8. Taking a bath uses twice as much energy as taking a shower.
   TRUE: A three or four minute shower saves about 50% of the hot water you would normally use in a bath. This is because more water is typically used for a short shower. By reducing your use of hot water, you reduce energy needed to heat the water.
9. Climate change is caused by the excess heat in our homes.
   FALSE: Climate change is caused by greenhouse gases. These gases are released into the atmosphere when certain kinds of fuels – called fossil fuels – are burned.
10. If people reduce their use of energy, they can stop climate change.
    FALSE: We probably can't completely stop climate change, but we can slow it down quite a bit, and make its impacts much less if we reduce our use of energy.
11. You use more energy idling your car than turning if off while you wait for someone to run a quick errand.
    TRUE: Idling your car for anything longer than ten seconds wastes more energy than turning it off and on again. The next time someone runs into the store for an errand, make sure the driver turns off the engine of the car while waiting.
12. Letting the tap run while you brush your teeth has nothing to do with using energy.
    FALSE: Energy is used to treat, pump and distribute water to your home. By wasting water resources, you also waste energy resources.

Commuter Challenge Survey and Tally Sheet

1. For each person in the family, ask the questions listed below. Write your answers in the table provided.
   - How do you normally travel to school/work?
   - Why do you use this mode of transportation?
   - What would encourage you to switch to a more environmentally friendly mode of transportation (e.g. walking, biking, taking public transit, carpooling)?

Name	Answers

2. Challenge family members to change one mode of transportation during the week of the commuter challenge (e.g. take the bus to work instead of driving, bike to church or a club event, etc.). How many kilometres is this trip? Mark goals down beside each name in the chart below as their personal transportation challenge goals for the week. Keep track of how successful each member is by placing a check mark each day they meet their goal. Note on the tally below other forms of transportation used during the week as well.

Name & Transportation Challenge Goal	Transportation goal and other transportation taken (& distance)						
	Mon	Tue	Wed	Thurs	Fri	Sat	Sun

Tally

1. Members of my family who met their transportation challenge goal:

2. The total number of kilometres (or number of trips) my family:
Walked: _____
Biked: _____
Took public transit: _____
Carpooled: _____
Drove car: _____
Other (describe): _____
This is more/less than normal: _____