

Task prepared for the project “Using Technology to Facilitate Connections between Literacy and the Broader Community” (2014)

Task Title: Tips to Reduce Your Energy Bill

OALCF Cover Sheet – Practitioner Copy

Learner Name: _____

Date Started (m/d/yyyy): _____

Date Completed (m/d/yyyy): _____

Successful Completion: Yes No

Goal Path: Employment Apprenticeship

Secondary School Post Secondary Independence

Task Description: In this activity, the learner will review a document from Waterloo North Hydro Energy Conservation Handbook about ways to reduce their energy bill.

Competency: A: Find and Use Information, B: Communicate Ideas and Information, C: Understand and Use Numbers

Task Groups: A1: Read continuous text, A2: Interpret documents, B2: Write continuous text, C1: Manage money, C3: Use measures

Level Indicators:

- A1.1: Read brief texts to locate specific details
- A2.2: Interpret simple documents to locate and connect information
- B2.1: Write brief texts to convey simple ideas and factual information
- C1.1: Compare costs and make simple calculations
- C3.1: Measure and make simple comparisons and calculations

Performance Descriptors: See chart on the last page

Materials Required:

- A copy of the task-based activity
- A copy of the document from [Waterloo North Hydro Energy Conservation Handbook](#)

TOP TEN

FASTEST, EASIEST, AND BEST EVER MONEY-SAVING TIPS

This booklet contains hundreds of ways you can reduce your energy use – but these top 10 tips are a great way to get started:

1 Use CFL or LED Bulbs

One compact fluorescent light bulb (CFL) or light emitting diode (LED) can save you three times its purchase cost in electricity. CFLs last up to 10 times longer than incandescent bulbs and can use up to 75% less electricity. You can replace an incandescent 100W light bulb with an 18W – 23W compact fluorescent and still get the same amount of light.

2 Install a Programmable Thermostat

During the heating season, set your programmable thermostat to automatically lower the heat by a few degrees at night or when you are away. If you have air conditioning, you can use your programmable thermostat during the cooling season to automatically turn it off or increase the temperature when you are not at home. Your energy savings will easily pay for the cost of the thermostat in the first year.

3a Replace Your Old Refrigerator or Freezer

Refrigerators and freezers are two of the biggest electricity users in your home – these old, inefficient appliances can cost well over \$10/month in electricity. When purchasing a new one, be sure to check the EnerGuide label and look for the ENERGY STAR® symbol so you are certain of energy savings when making your buying decision.

3b Get Rid of Your Second Refrigerator

It may be convenient having an extra refrigerator, but those cold beverages are costing you every day...up to \$125 per year.

4 Wash Your Laundry in Cold Water

You can save energy and money by washing all of your laundry in cold water. If you currently both wash and rinse in warm water, and you switch entirely to cold, you could save over \$14 a month (based on electric water heating). There are many laundry detergents designed specifically for cold water washing.

5 Look for the ENERGY STAR® Label

ENERGY STAR® is an international symbol that identifies many energy efficient products. The ENERGY STAR® symbol helps businesses and consumers identify products that are at the “top of their class” in terms of energy efficiency.

7 Install Insulation

You can save energy and money by increasing the amount of insulation in your home, to keep it warmer in the winter and cooler in the summer. The attic and basement are good places to start, because those areas represent as much as 15% - 30% of your home's overall heating and cooling losses. Upgrading insulation levels is one of the smartest energy saving investments you can make.

8 Use Motion Sensor Switches and Timers

To avoid leaving your outside lights on for long periods of time, install a motion sensor that turns the lights on automatically when someone approaches the house and then turns the lights off after a pre-set period of time. Install timers on selected lights to avoid leaving lights on around the clock and to make your home look occupied when you are away.

9 Rely on Your Fans

Use fans instead of air conditioning when possible. Ceiling and portable fans cost pennies to operate and can lower the temperature in the room by up to 2°C.

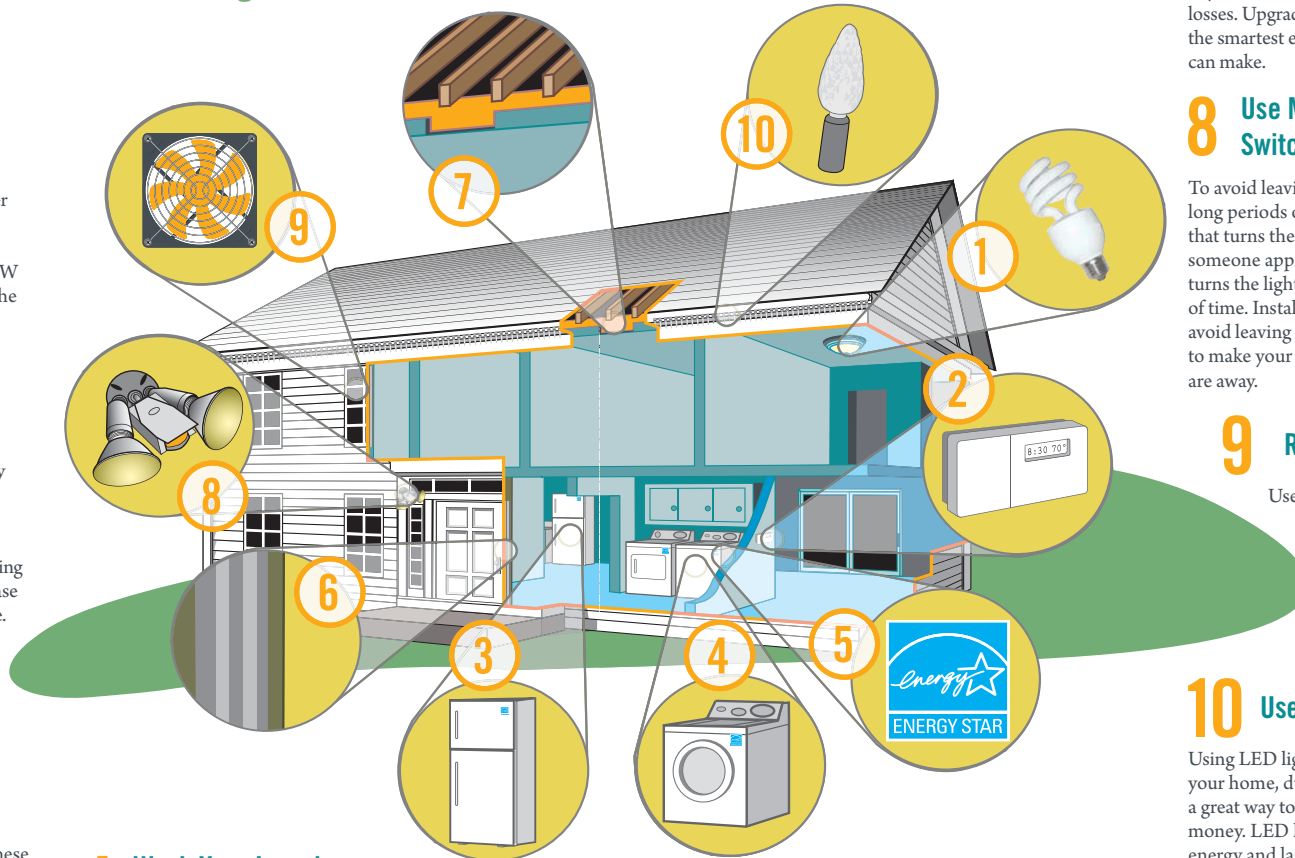
10 Use LED Seasonal Lighting

Using LED lights both inside and outside your home, during the holiday season, is a great way to conserve energy and save money. LED lights use up to 95% less energy and last at least seven times longer than regular lights. There are no filaments or glass bulbs to break, and they produce very little heat.

Seasonal LED bulbs come in a variety of shapes and colours.

6 Eliminate Drafts in Your Home

Air leakage around windows, doors, vents and electrical outlets can account for as much as 25% of your total heating costs. That means there are significant savings available if you caulk and weather-strip windows, doors, dryer and other vents, and install insulated plates on electrical outlets.



Learner Information and Work Sheet 1

Hydro is expensive and it is always helpful to learn ways to save costs. Look at the document Top Ten Fastest, Easiest, and Best Ever Money-Saving Tips from Waterloo North Hydro Energy Conservation Handbook.

Task 1: List five ways to lower the energy costs in your home.

a)

b)

c)

d)

e)

Task 2: Give 3 to 4 reasons why CFL and LED light bulbs are better than incandescent light bulbs.

a)

b)

c)

d)

Task 3: If an incandescent light bulb lasts for 6 months or half a year, how long in months and years would a CFL light bulb last?

Answer:

Work Sheet 2

Task 4: What is the Energy Star label?

Answer:

Task 5: If you only use cold water to wash your laundry, how much money could you save in a year?

Answer:

Task 6: How do you reduce drafts around windows, doors, vents, and electrical outlets?

Answer:

Task 7: What can be used instead of an air conditioner to cool a room and reduce costs?

Answer:

Task 8: If you replace your old refrigerator with an Energy Star fridge, how much would you save on your energy bill in a year?

Answer:

Answers

Refer to the document Top Ten Fastest, Easiest and Best Ever Money-Savings Tips, if required. The answers do not have to be in complete sentences, or exactly as written below.

Task 1: Choose any five of the following:

- Use CFL or LED bulbs
- Install a programmable thermostat
- Replace your old refrigerator or freezer
- Get rid of your second refrigerator
- Wash your laundry in cold water
- Look for the Energy Star label
- Eliminate drafts in your home
- Install insulation
- Use motion sensor switches and timers
- Rely on your fans
- Use LED seasonal lighting

Task 2: Choose 3 or 4 of the following:

- Save three times their cost
- They last 10 times longer
- Use up to 75% less electricity
- You can replace a 100W light bulb with an 18W-23W CFL and get the same amount of light

Task 3: 60 months or 5 years

Task 4: A symbol that identifies energy efficient products

Task 5: \$168.00

Task 6: Caulk, weather-strip, and install insulated plates

Task 7: Fans (ceiling and portable)

Task 8: \$120.00

Performance Descriptors 1

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
A1.1	Reads short texts to locate a single piece of information			
A1.1	Decodes words and makes meaning of sentences in a single text			
A1.1	Follows simple, straightforward instructional texts			
A1.1	Identifies the main idea in brief texts			
A2.2	Locates information in simple graphs and maps			
A2.2	Uses layout to locate information			
A2.2	Makes connections between parts of documents			
A2.2	Makes low-level inferences			
B2.1	Writes simple texts to request, remind, or inform			
B2.1	Conveys simple ideas and factual information			
C1.1	Adds, subtracts, multiplies, and divides whole numbers and decimals			
C1.1	Interprets and represents costs using monetary symbols and decimals			

Performance Descriptors 2

Levels	Performance Descriptors	Needs Work	Completes task with support from practitioner	Completes task independently
C3.1	Recognizes values in number and word format			

This task: Was successfully completed Needs to be tried again

Learner Comments:

Instructor (print):

Learner (print):

URLs

Waterloo North Hydro Energy Conservation Handbook:

- https://www.wnhydro.com/en/conservation/resources/Tips%20Tools%20and%20Links/WD008-Energy-Conservation-Book_Waterloo.pdf