



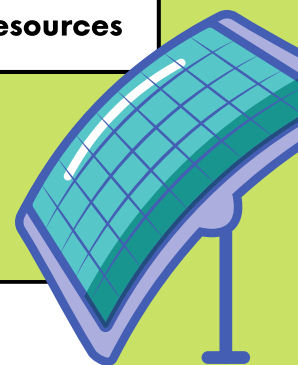
Grade: 5

Subject: Science

Time: 60min

Topic: Conservation of Energy and Resources

ENERGY PT. 1



BIG QUESTION (S)

What are the different forms of energy? What are the long-term effects of energy and resource use on society and the environment?

SUCCESS CRITERIA

Students will understand the different ways in which energy transforms, how to conserve energy and the difference between renewable and non-renewable energy.

ONTARIO CURRICULUM EXPECTATIONS

- Identify a variety of forms of energy
- Identify renewable and non-renewable sources of energy
- Describe how energy is stored and transformed in a given device or system

LESSON COMPONENTS

The teacher will start by giving a minds-on activity and ask *"How did you get to school today? How did you get the energy to focus in school today?"* or prompting questions such as *"what is energy"* and *"What might we see or hear to prove that energy is present?"*

The students can get into groups to brainstorm different forms of energy. The teacher will ask *"What forms of energy are visible in our school?"*

Once the students have discussed their ideas and have come up with some examples they will add their ideas to the whiteboard.

The teacher will then introduce how energy transforms and give a few examples. (The food you eat in the morning gives you the energy to walk). The teacher will hold up the wind-up car and ask the students *"What role does energy play in "causing" toys to move, or become active?"* and *"Is the energy transforming?" "How so?"*

The teacher will hand out toy wind-up cars to the students and they will begin their experiment of energy transformation. Pull back a few centimeters and see how far they go and then pull back farther and see how far it goes. Students will discover that the energy you put in is what you get out)

ASSESSMENT

Students will be assessed through their understanding and completion of the worksheet provided.

