GENERATION E

# LET'S LEARN ABOUT ENERGY EFFICIENCY WITH ENERGY ED AND JENNY JAY!

**Grade level:** Kindergarten to Grade 2
**Total time:** 40 to 50 minutes

## ABOUT THIS ACTIVITY

Through puppets, movement, toys, and interactive activities, students explore what energy is and simple ways they can use less at home and in their community.

## LEARNING OUTCOMES

### BY THE END OF THIS LESSON, STUDENTS WILL BE ABLE TO:

- define energy and energy efficiency in simple terms;
- identify different sources of energy;
- recognize ways to save energy at home and school;
- develop social, emotional, and communication skills through group activities; and
- connect physical activity and play with the concept of energy.

## WHAT YOU'LL NEED

- Puppets: Jenny Jay (blue jay) and Energy Ed (bison)
  - Printable versions can be glued to cardstock and put on popsicle sticks
- Puppet script (you can find this at end of the lesson plan)
- Space for movement (running in place and jumping jacks)
- Toys: Battery-operated, pull, solar-powered
- Energy types flashcards
- "Find the energy" handout for each student
- Clipboards for each student
- Markers, crayons, or other colouring supplies
- Activity book and "Energy Saver" stickers as handouts

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# INSTRUCTIONS

## 1. INTRODUCTION WITH PUPPETS (10 MINUTES)

- Introduce students to Energy Ed and Jenny Jay using the puppets and introductory script notes as a guide.
- Ask students what they think energy is and let them share their ideas.
- Explain key concepts:
  - **Energy:** What makes things work and move
  - **Energy efficiency:** Using less energy to do the same work
- Discuss different types of energy and ways to save energy at home, at school, and in their community.
- Encourage questions and examples from students.
- Use puppets to respond to students' ideas to keep the discussion lively.

## 2. LET'S MOVE TO UNDERSTAND ENERGY (5 TO 10 MINUTES)

- Use simple movements and actions to help students feel their own energy.
- Compare body energy to the energy in objects using the following questions and prompts.

### Discussion prompts & questions

- **Movement vs. objects**
  - When you jump, you use your energy. What makes the lights turn on?
  - What's different between our energy and the light's energy?
  - Let's all jump!
  - Now let's all pretend to flip a light switch.
- **Energy changes**
  - When you pedal a bike, what happens to the wheels?
  - When you push a toy car, it rolls. Where did the energy come from?
  - Let's pretend to ride a bike. What are our legs doing?
  - Let's push a toy car. Who gave it energy?
  - What other things move when we use our energy?
- **Our bodies use energy**
  - What do we eat to get energy to play?
  - Let's pretend we're eating yummy food.
  - What foods help you run fast and jump high?
  - What happens when we don't eat breakfast?



- **Saving energy**
  - If we turn off the light, what are we saving?
  - Should we leave the TV on if no one is watching?
  - Let's turn off the classroom lights. What changed?
  - Let's vote — thumbs up or thumbs down! Are we saving energy when we turn off the lights when leaving our classroom?
  - What are other ways we can save energy?

## 3. EXPLORING WITH TOYS (5 TO 10 MINUTES)

- Use a battery toy, a pull toy, and a solar toy to demonstrate different energy types: electricity, body power, and sunlight.
- Ask students to guess which type of energy powers each toy before demonstrating.

## 4. INTRODUCE ENERGY TYPES FLASHCARDS (5 TO 10 MINUTES)

- Show the different types of energy with the flashcards provided.
- Talk about each type of energy and ask students for examples from their daily lives.

## 5. "FIND THE ENERGY" HUNT! (10 MINUTES)

- Split students into groups of two.
- Distribute the "Find the energy" handout, pencil crayons, and clipboards.
- Students work in pairs to find objects in the classroom that use energy (e.g. lamp, computer, fan, clock, light switch, etc.).
- Students draw what they find on their sheets.

## 6. SHARING THEIR DISCOVERIES (5 MINUTES)

- Each group shares their findings with the class using the puppets to pass the talking turn. Only students holding a puppet may speak.
- Discuss what type of energy each item uses. Use flashcards to reinforce vocabulary.
- Encourage teamwork and collaboration.

## 7. CONCLUSION (5 TO 10 MINUTES)

- Summarize key ideas about energy and efficiency using the conclusion script notes.
- Encourage students to share one way they'll save energy at home or school.
- Hand out "Energy Saver" stickers to each student.
- Introduce the activity booklet for continued learning at home or in class.
- **Optional:** Teachers can extend learning with the "My Pledge to the Planet" activity.

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# PUPPET SCRIPT | INTRODUCTION

## FACILITATOR:

Hello friends! I'm very happy to be here with you today.
My name is (facilitator or teacher's name) and these are my two friends,
the mascots of Generation E:

Here's Jenny Jay... (show the blue jay puppet)
...and here's Energy Ed! (show the bison puppet)

They have a lot of questions about energy and energy efficiency,
and I need your help to find the answers!

## ENERGY ED:

Hello friends! I know we shouldn't waste energy...but...what exactly is energy?
I can't see it or touch it!

## FACILITATOR:

Questions for students:
(Let students suggest ideas, then fill in as needed.)

1. **What do you think energy is?**

   Energy is what makes things work and move. It makes our toys light up, helps us travel from one place to another, helps us cook, and gives us the strength to run and play.

2. **Can you give examples of places where we see or use energy every day?**

   Energy can come from the sun, the earth, and even the food we eat.

3. **Where do you think we can find energy in your home or at school?**

   Today, we're going to discover several sources of energy together.

   For example:

   - Electricity, which makes our lights, television, and tablets work.
   - Heating, which keeps us warm, and cooling, which keeps us cool.
   - Energy of movement, which lets us run, jump, and play!

## JENNY JAY:

So, what happens to the planet when we waste too much energy?

## FACILITATOR:

Questions for students:

1. **Why do you think wasting energy isn't good for the planet?**

   If we use too much energy, our air, water, and environment become less healthy.

2. **What might happen to our planet if we use too much energy?**
   - The air could be less clean.
   - Water could get polluted.
   - And there could be fewer trees and plants.

   By taking care of energy, we help the planet stay healthy!

3. **What are some things you can do to use less energy at home or at school?**

   Here are some easy steps we can take:
   - Turn off the lights when you leave a room.
   - Close doors and windows when it's cold outside.
   - Ask an adult to unplug devices that aren't in use.
   - Walk or ride a bike whenever possible.
   - Use less water.

Today, we're going to learn how to become Energy Detectives, so we can save energy at school and at home!

### JENNY JAY & ENERGY ED:

Great!

### FACILITATOR:

Ready to have some fun? Let's move around and explore energy! Everyone, stand up!

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# PUPPET SCRIPT | CONCLUSION

## FACILITATOR:

Today, we've learned so much! We discovered that energy helps us do lots of things — play, move, and stay warm!

Here are a few things to remember:

When it's cold outside, we can close the windows to keep the warm air inside.

And when it's sunny in the winter, we can open the curtains to let the sun in — it gives us free heat! The sun is our friend!

## JENNY JAY:

We can also let warm air circulate by not blocking radiators with toys or chairs. When we save energy, we help the Earth stay healthy!

## ENERGY ED:

We can all help save energy, at school and at home.
With the help of your teacher, you can:

- turn off the lights;
- close the blinds, windows, and doors; and
- check that electronics are turned off for the weekend.

## FACILITATOR:

Great job, Energy Detectives!

**(Give high fives)**