



Overview

Topic	Energy Efficiency	Date	
Grade Level	6-8	Presenter	
School		Teacher	

Goal

Students will learn what efficiency and conservation mean. They will understand the importance of conserving energy, and learn some ways to do so at home and at school.

Timeline

Ice Breaker: 5 min
 Presentation: 15 min
 Classroom Activity: 10 min
 Conclusion: 5 min

Materials

Poster board or large pieces of paper, at least one for every student in the classroom
 Coloring Utensils

Ice Breaker

What does efficiency mean?

What does conservation mean?

Ask students to think about these two words, and how their definitions are different.

Presentation / Core Content

- Efficiency – what does it mean?**

If you touch a lightbulb that has been turned on for a while, is it cold or hot?

We use lamps to see, but not all of the electricity makes light. Some of it turns into heat. This means that the lightbulb is not 100 percent efficient.

Can you think of other ways that our appliances are inefficient? What about electricity production and transit?

- Conservation – what does it mean?**

Conservation demonstration

Show students a bowl with candy, marbles, or some other small objects. Explain that as you walk around the room, students can take as many as they like from the bowl. You will add one candy or marble to the bowl every 30 seconds. The first time around, students may take the candies out at a faster rate than you replace them.

Explain: Conservation means using something slowly, so that everyone can have some, now and in the future. This is very important when it comes to energy. Imagine that the stored energy on our planet is like these marbles. Right now, we are taking them at a much faster rate than the earth is producing them!

There are lots of ways you can help save energy and help the planet!

Efficiency and conservation both help us save energy.

Any ideas about how you can help save energy? Allow students to brainstorm for a few minutes, then share the tip sheet available in the Additional Resources section.

Classroom Activity

Break the class into small groups of 3-4. Have the students make reminder posters for their home, classroom, school and/or community. You can have student groups vary with their targeted audience – for example, have one group of students make a poster for their school, one group make a poster for their home, etc. Or you can have everybody work with the same parameters. Have each group make at least one poster.

Conclusion

Ask if any student groups would like to present their posters, allow time for at least a few students to present. End the presentation by reminding students that discussions around energy can seem intimidating, or like they can't do very much to help with the bigger problem. Remind the students that little changes in their daily life can make a big difference, and they be a part of the solution now!