**LESSON PLAN - Conserving Energy**

Students will create projects to inform others on ideas for conserving energy.

OBJECTIVES : Students will be able to...

Determine and share ways for people to change their energy usage.

SUBJECTS

Science

GRADE-4

STEPS : Hook

 **Activity:** Investigating

Students will watch a short video about wasting energy to get them thinking about conserving energy.

<https://www.youtube.com/watch?v=4zYjAUqRCL8>

2 DIRECT INSTRUCTION

Teacher will lead a discussion about conserving energy by posing the question: "Why is it important to conserve energy?" Students will discuss their knowledge about energy conservation. Reflecting the iPad on the SmartBoard, the class will create a KWL chart about conserving energy.

3 GUIDED PRACTICE



**Activity:** Exploring

Students will follow the link to learn more about energy conservation. They will explore the website and find ways that people can easily conserve energy. Student will use what they find for later in the lesson. <http://www.energyquest.ca.gov/saving_energy/>

Students will work in 5 groups to survey teachers around the school on their energy usage. The questions that students will ask the teachers are the following:

**All questions have the answers of:** Always, Often, Sometimes, Rarely, Never.

How often do you turn off the lights when they are not needed?

In the winter, how often do you set the thermostat to 68 degrees or colder?

In the summer, how often do you set the thermostat to 76 degrees or warmer?

How often do you use public transportation or car pool?

How often do you walk or ride a bike instead of driving?

Students will record answers to these questions and bring them back to the large group. As a class, students will create a chart of teacher energy conservation.

4 INDEPENDENT PRACTICE

[PhotoGrid - Video & Pic Editor](https://www.commonsense.org/education/app/photogrid-video-pic-editor)

Free

Each person in the group will create a photo collage about one of the questions from the survey. Each collage will will share pictures and tips on how to conserve energy. Students will access the directions for their collage.

**Directions for Conserving Energy**

Each individual in your group will create one pic collage about one of the survey questions.

Pick one of the questions from the survey.
Take pictures to relate to the idea.
Research tips to help conserve energy in that way.
Create a pic collage about the question to include:

     -Pictures to relate to the idea.
     -Tips to conserve energy.
     -Reasons why conserving energy this way is important.
     -Explain why we need to use renewable/alternate energy.

**You will be assessed on the following:**

Collage

4- Contains all requirements plus extra materials.

3- Contains all requirements.

2- Contains most of the requirements.

1- Contains few of the  requirements.

Conserving Energy

4- The ideas presented for conserving energy are understandable and relatable.

3- The ideas presented for conserving energy are understandable.

2- The ideas presented for conserving energy are mostly understandable.

1- The ideas presented for conserving energy are not understandable.

Groups will put their photo collages together in a short slideshow and upload it to the Schoology page in the media album titled Conserving Energy Slideshow.

5 WRAP-UP



**Activity:**Presenting

Groups will share their energy conservation recommendation slideshows with other classrooms so students in the school can understand ways to conserve energy.