

School Electricity Use Scavenger Hunt



GRADE: 4TH

TIME: 2-3, 60 Minute Periods

TOPIC: Energy Conservation

STANDARDS:

- 4.P4U3.4 Engage in argument from evidence on the use and impact of renewable and nonrenewable resources to generate electricity.
- 4.RI.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
 - 4.W.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

ENGAGE: 5-10 MINUTES

- Ask your students to think about how many times they have used electricity today.
- Create a line plot together based on the answers.
- Suggest some ideas of ways they did not consider. Did they use an electric toothbrush, the refrigerator, a hair dryer, etc.?
- Adjust the line plot as students discover more ways they used electricity.

EXPLORE: 10-15 MINUTES

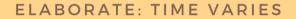
Break students up into pairs or small groups and have them go around the classroom and (possibly the school) and write down ways in which electricity is being used. The tool provided on page 3 can be printed for your students to complete the school audit. Tell them they need to figure out if the use was necessary or not. This will kickstart the discussion in the next section.



EXPLAIN: 30-40 MINUTES (END OF DAY 1)

- Ask some teams to share one or two highlights from their data and how many times they felt that use was not necessary.
- Discuss why the use was or was not needed for one or two items.
- Ask them why they think it is important to save energy and cut down on electricity usage.
- After your discussion, you can begin talking to students about energy conservation using the presentation on the TEP link below this lesson.
 There are notes in the presentation for support.

Home Learning Opportunity: Pass out the Home Audit worksheet on page 4 that they can do this afternoon. Directions are on the page.



Ask students to share what they discovered in their home audit. Then students will use the Home Energy Tips to create a school energy tips guide. An example you can show from the website would be to write a tip about shutting off the lights instead of switching the lightbulbs. The website can be a guide about how to write the tips. The recommended group size is 3 students, but it can be adjusted based on need. Groups should seek to create at least 4 good tips related to electricity usage within the school. Students can reference their original data sheet for ideas on topics to present as a poster, slide show, video, or any other approved format. The work time will vary. You may provide the rubric on page 5 for your students to know what is expected.

EVALUATE: TIME VARIES

Student groups should present their work to the class. You may use the rubric to grade their work.



Team Member Names:	

School Electricity Use Scavenger Hunt

How electricity is being used: (Example: Computer)	How many times do you see the same use? (Tally marks)	Was it necessary? (Is it needed for the lesson or activity, or could it be done without?) Yes No	
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Name:			
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Home Energy Audit

When you are home, try to find some of the items on this page, or add your own examples of how energy is being used. First, check mark that you have it, then add tally marks for each time you used it during the day.

Energy Using Item	Do you have it?	How Many Times Did You Use It Today?
Washer		
Dryer		
Refrigerator Television		
Laptop/Computer		
Microwave		

Name:

Grading Rubric

Criteria	4 Advanced	3 Proficient	2 Improving	1 Warning
Content	Four or more clear school conservation tips are in the presentation that are supported by a description or image	Four tips were explained clearly with good details or images, but some areas could have been stronger	Three or Four tips were explained, but missing details <i>or</i> only two or three tips were created, and the work is incomplete	Two tips or less were given without descriptions
Organization	Presentation is well- organized and provides logical transitions between tips or speakers	Presentation is well- organized; provides transitions between tips or speakers	Presentation is disorganized in spots; some transitions are unclear or missing between tips or speakers	Presentation is disorganized; transitions unclear or missing between tips or speakers
Delivery	Speaker is enthusiastic, audible, maintains eye- contact with audience throughout, and uses inflection of voice effectively	Speakers are usually audible, make frequent eye-contact with audience, and use inflection of voice.	'	Speakers are inaudible; no eye- contact; no inflection
Collaboration	Each member contributes equally; team members are engaged throughout	All team members contribute and are engaged throughout	Some team members do not contribute sufficiently or are not engaged	Some team members do not contribute and are not engaged