

Lesson Title: Light and Electricity

Course: Grade 4

Designer: Jerome Schmeiser

Learning Outcomes/ Measurable Objectives

LI4.3

Assess personal, societal, and environmental impacts of light-related technological innovations including optical devices.

Measurable Objectives:

Students will be able to verbally identify sources of electricity in Saskatchewan.

Students will make verbal predictions for the future of energy in Saskatchewan in small groups and to the whole class

Assessment Evidence

Formative Assessments (Assessment for Learning):

Verbalization of discussed topic and participation in class discussion

Materials

laptop connected to projector, whiteboard, vegan marshmallows, BBQ lighter, heat-resistant gloves, heat resistant bowl with water, metal tongs.

Learning Plan

Learning Experiences & Instruction:

Engage: Hey students, the last two lessons we have been talking about light and its properties. We talked about what an emitter is, and now I'd like to talk to you about how emitters like the lights in our homes, schools and businesses make light.

Explain: Using [this google doc](#), discuss the history of European settlers coming to Treaty Territory and bringing with them their style of housing and lighting. Make reference to the founding of Regina on Treaty 4 land, and expand into how Regina's first power plant was coal fired. Show modern coal plant (Boundary Dam) and discuss how coal makes electricity. Do a marshmallow burning to illustrate getting energy from the burning of something, and that residue and gases/smoke are generated. Give each student a marshmallow and continue to lead a class discussion on other sources of energy in our province.

Elaborate: Discuss natural gas plants, solar energy, wind energy and hydroelectric. You can use this [Sask Power website](#) to see all the sources of power in the province. Ask the students to discuss among themselves what they think the future of energy in our province will be like.

Questions