Mini Lesson Plan

Learning Segment Focus: _____Heat Energy_____ Lesson __4__ of __6___

Course & topic addressed: _Physical Science/Energy__ Date _12/13/2020___ Grade _4__

Students Outcomes

Specific leaning objectives for this lesson.	Students will be able to explain the difference between convection, radiation, and conduction.
Justify how learning tasks are appropriate using and example of students prior academic learning.	This lesson will allow the students to use their listening skills. The students will also use their experiences with heat.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents.

Key Vocabulary

What vocabulary terms/content specific terminology must be addresses for students to master the content.	Heat, hot, warm, cool, cold, temperature, thermometer, degrees, Celsius, Fahrenheit, movement, transfer, conduction, conductor, insulation, insulator, convection, boiling, heat source, kinetic energy, friction, electrical energy, electrical appliances, chemical energy, burning

Materials

Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Paper, pen, internet, computer, projector, stove (kitchen), graham crackers, marshmallows, chocolate, long sticks, osmos, pan, water4-
Materials needed by students for this lesson. (computers, journals, textbook, etc.)	Osmos, graham crackers, marshmallows, chocolate, long sticks

Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	Teaching & Learning Activities (Bulleted Style)	Describe what the teacher will be doing and/or students. (Make it detailed)
10 minutes	**Introduction:** • Students will be asked where they think heat comes from	I will ask the students to share their thoughts and opinions on where heat comes from I will then ask students to share how they use heat where they live.

	• Students will be asked how they use heat where they live. • Students will watch a short YouTube on heat energy.	I will play a short YouTube video on heat energy that will be displayed on the overhead projector.
25 minutes	**Introduction:** • Students will line up and walk to the home economics room. • Here they will be shown the difference in radiation, convection, and conduction. • Students will then can make smores. We will use the Bunsen burners that were previously set up. Students will pair into groups of 5. Each group will be accompanied by an adult. • Once the students are done making smores, each group will receive an Osmos pizza game set up. • They will have the remaining class time to play.	I will line my students up and walk them down to the schools home economics room. I will then discuss the difference in convection, conduction, and radiation while showing them an example of each by using a pot, pan, water, and the stove. I will then give instructions on making smores and let the students know that they are to stay back and allow the adult that they are assigned to help. Once every students has made their smore, I will distribute the osmos pizza games and instruct the students on what to do. I will walk around helping any student that is have trouble.
5 minutes	**Closure:** • Students will ask any questions that they may have.	I will answers any questions that the students ask.

Accommodations/Modifications

How might I modify instruction for: *Remediation?* *Intervention?* *IEP/504?* *LEP/ESL?* (All students who have plans mandated by federal and state law.)	For my students that need modification would have a smore that was already made along with a worksheet that they could color. The worksheet would have information on how we used heat to make the smores. I will also have a worksheet that will demonstrate conduction, convection, and radiation.

Technology Connections

Technology that will be sed during the lesson plan. (Bullet Style)	Osmos, stove, YouTube