Harley Bress — Physical Science 2014-15 Q3 Week 2

WEEK

STANDARDS

Science [9] SB2.1 The student demonstrates an understanding of how energy can be transformed, transferred, and conserved by applying the concepts of heat transfer (i.e., conduction, convection, radiation) to Alaskan dwellings

NOTES

MONDAY

Segment	Activity	Description
0-5 minutes	Daily QOD or Discussion	The following QOD will help to engage the student prior to starting the lesson and will help to provide the groundwork to keep students engaged:
		QOD (timed-pair share: ALL): Describe a type of heating system. (a system that heats things)
5-10 minutes	Engage/Motivate	Students will discuss QOD and how it applies to prior knowledge. We will discuss old and new vocabulary as it pertains to this lesson.
10-40 mins	Whole Group Instruction	Daily lesson plan including examples and modeling, strategies, student participation in new strategies and models.
		 QOD Review Read pages 152-159 (or part of it) DAY 1 Review 1st and 2nd laws of thermodynamics Mini-Lab page 156 - Sand Shaker! (need styrofoam cups!) Questions 16-22 pge 159 (probably tomorrow)
40-60 mins	Group practice/ small group and individual instruction	Students will have a chance to do projects and classwork based on the day's lesson. Teacher will monitor progress, answer questions and provide scaffolding for student progress.
Also 40-60 minute period	Assessment via a variety of methods	Nimbus questions, quick quizzes and other methods will be used to quiz students current knowledge at the end of class.
	Standards Addressed.	Alaska State Science Standards:

TUESDAY

Segment	Activity	Description
0-5 minutes	Daily QOD or Discussion	The following QOD will help to engage the student prior to starting the lesson and will help to provide the groundwork to keep students engaged:
		QOD A: Describe the 2nd law of thermodynamics.
		QOD B: If there is an area of high heat and another area of low heat, how will heat change with time?
5-10 minutes	Engage/Motivate	Students will discuss QOD and how it applies to prior knowledge. We will discuss old and new vocabulary as it pertains to this lesson.
10-40 mins	Whole Group Instruction	Daily lesson plan including examples and modeling, strategies, student participation in new strategies and models.
		 Discuss QOD. Read pages 152-159 (finish) DAY 2 Review 1st and 2nd laws of thermodynamics Mini-Lab page 156 - Sand Shaker! (if we did not get to it yesterday) Questions 16-22 pge 159 (ONLY A students- B students only need to do question 16)
40-60 mins	Group practice/ small group and individual instruction	Students will have a chance to do projects and classwork based on the day's lesson. Teacher will monitor progress, answer questions and provide scaffolding for student progress.
Also 40-60 minute period	Assessment via a variety of methods	Nimbus questions, quick quizzes and other methods will be used to quiz students current knowledge at the end of class.

Segment	Activity	Description
	Standards Addressed.	Alaska State Science Standards:

WEDNESDAY

Segment	Activity	Description
0-5 minutes	Daily QOD or Discussion	The following QOD will help to engage the student prior to starting the lesson and will help to provide the groundwork to keep students engaged:
		QOD (whiteboards): First person draws a picture of a housepasses board clockwiseeach person adds something to the house to make it stay warmer in the winter.
5-10 minutes	Engage/Motivate	Students will discuss QOD and how it applies to prior knowledge. We will discuss old and new vocabulary as it pertains to this lesson.
10-40 mins	Whole Group Instruction	Daily lesson plan including examples and modeling, strategies, student participation in new strategies and models.
		 A: 1. Explain either how a refridgerator works or an air conditioner works. Write 1/2-1 page in your journal. B. 1. Make a quick drawing in your journal showing how a refridgerator gets cooler and the room it is in gets warmer. 2. Introduction to Conduction in Gases - Lab. 3. Finish Homework From Mon-Tues.
40-60 mins	Group practice/ small group and individual instruction	Students will have a chance to do projects and classwork based on the day's lesson. Teacher will monitor progress, answer questions and provide scaffolding for student progress.
Also 40-60 minute period	Assessment via a variety of methods	Nimbus questions, quick quizzes and other methods will be used to quiz students current knowledge at the end of class.
	Standards Addressed.	Alaska State Science Standards:

THURSDAY

Segment	Activity	Description
0-5 minutes	Daily QOD or Discussion	The following QOD will help to engage the student prior to starting the lesson and will help to provide the groundwork to keep students engaged:
		QOD(all): Normally the atmosphere gets heated from the ground up. What happens when an inversion occurs?
5-10 minutes	Engage/Motivate	Students will discuss QOD and how it applies to prior knowledge. We will discuss old and new vocabulary as it pertains to this lesson.
10-40 mins	Whole Group Instruction	Daily lesson plan including examples and modeling, strategies, student participation in new strategies and models.
		 Discuss QOD Lab (all): Conduction in Gases Day 1 - Take 4 Readings!
40-60 mins	Group practice/ small group and individual instruction	Students will have a chance to do projects and classwork based on the day's lesson. Teacher will monitor progress, answer questions and provide scaffolding for student progress.
Also 40-60 minute period	Assessment via a variety of methods	Nimbus questions, quick quizzes and other methods will be used to quiz students current knowledge at the end of class.
	Standards Addressed.	Alaska State Science Standards:

FRIDAY

Segment	Activity	Description
0-5 minutes	Daily QOD or Discussion	The following QOD will help to engage the student prior to starting the lesson and will help to provide the groundwork to keep students engaged:
		QOD(all):What is happening to the temperatures over time in the lab?
5-10 minutes	Engage/Motivate	Students will discuss QOD and how it applies to prior knowledge. We will discuss old and new vocabulary as it pertains to this lesson.
10-40 mins	Whole Group Instruction	Daily lesson plan including examples and modeling, strategies, student participation in new strategies and models.
		 Discuss QOD Lab (all): Graph, analyze data, conclude and apply (A only) (B) Handout - Conduction/Convection and Radiation.

Segment	Activity	Description
40-60 mins	Group practice/ small group and individual instruction	Students will have a chance to do projects and classwork based on the day's lesson. Teacher will monitor progress, answer questions and provide scaffolding for student progress.
Also 40-60 minute period	Assessment via a variety of methods	Nimbus questions, quick quizzes and other methods will be used to quiz students current knowledge at the end of class.
	Standards Addressed.	Alaska State Science Standards: