WEEK OF Feb 24th-28th, 2025

COURSE: 8th Grade ADV Science TEACHER: Turner PERIODS: 1, 3, 4, 5, 6

	OBJECTIVES	ACTIVITIES	MATERIALS	HOMEWORK	ASSESSMENT	STANDARDS
MON	Differentiate between potential & kinetic energy. Identify and describe different types of energy. Sort different energies into the two major categories of kinetic & potential energy. Calculate potential and kinetic energy of an object. Discuss how energy is conserved. Draw energy transformation diagrams. Identify energy transformations that occur in diagrams. Observe changes in energy and that the total energy remains constant.	**GEN BR**: Energy questions **ADV BR:** Energy questions **Students will:** **GEN:** Read What is Energy? Article & answer questions; complete GPE Word Problems (A); complete KE Word Problems (A). **ADV:** Complete Checkpoint 6.2; read Sources of Energy Article & answer questions; watch video - When a Physics Teacher Knows His Stuff; complete Skate Park Basics PhET simulation.	What is Energy? Article GPE Word Problems (A) KE Word Problems (A) E3/A+ Checkpoint 6.2 Sources of Energy Article When a Physics Teacher Knows His Stuff video Skate Park Basics PhET simulation	Finish any unfinished classwork	Participation; checkpoint; PhET	ACOS: 13. Create & analyze graphical displays of data to illustrate the relationships of kinetic energy to the mass and speed of an object. 14. Use models to construct an explanation of how a system of objects may contain varying types and amounts of potential energy. 15. Analyze & interpret data from experiments to determine how various factors affect energy transfer as measured by temperature. 16. Apply the law of conservation energy to develop arguments supporting the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
TUES	Differentiate between potential & kinetic energy. Identify and describe different types of energy. Sort different energies into the two major categories of kinetic & potential energy. Calculate potential and kinetic energy of an object.	**GEN BR**: Energy questions **ADV BR:** Energy questions **Students will:** **GEN:** Finish Energy Guided notes; complete KE/PE Calculations & Energy Crossword.	Energy Guided notes KE/PE Calculations & Energy Crossword E3/A+ Unit 6 notes Energy Transfer Diagrams Worksheet	Finish any unfinished classwork **GEN: review for Energy Vocab test tomorrow**	Participation	ACOS: 13. Create & analyze graphical displays of data to illustrate the relationships of kinetic energy to the mass and speed of an object. 14. Use models to construct an explanation of how a system of objects may contain varying types and

	Discuss how energy is conserved. Draw energy transformation diagrams. Identify energy transformations that occur in diagrams. Observe changes in energy and that the total energy remains constant.	**ADV:** Complete KE/PE Calculations & Energy Crossword; discuss Unit 6 notes - Law of Conservation of Energy & energy transformations or conversions; demonstrate energy transformations; complete Energy Transfer Diagrams Worksheet.				amounts of potential energy. 15. Analyze & interpret data from experiments to determine how various factors affect energy transfer as measured by temperature. 16. Apply the law of conservation energy to develop arguments supporting the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
W E D	Discuss how energy is conserved. Draw energy transformation diagrams. Identify energy transformations that occur in diagrams. Observe changes in energy and that the total energy remains constant.	**GEN BR**: Energy transfer questions **ADV BR:** Energy transfer questions **Students will:** **GEN:** Review Energy Study Guide; review for Energy test tomorrow. **ADV:** Turn in KE/PE Calculations & Energy Crossword HW: begin Bungee Barbie Lab.		Finish any unfinished classwork **GEN: Energy vocab test**	Participation; lab	ACOS: 13. Create & analyze graphical displays of data to illustrate the relationships of kinetic energy to the mass and speed of an object. 14. Use models to construct an explanation of how a system of objects may contain varying types and amounts of potential energy. 15. Analyze & interpret data from experiments to determine how various factors affect energy transfer as measured by temperature. 16. Apply the law of conservation energy to develop arguments supporting the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
T H U R S	Discuss how energy is conserved. Draw energy transformation diagrams. Identify energy	**GEN BR**: Energy questions **ADV BR:** Energy questions **Students will:**		Finish any unfinished classwork		ACOS: 13. Create & analyze graphical displays of data to illustrate the relationships of kinetic energy to the mass and

	transformations that occur in diagrams. Observe changes in energy and that the total energy remains constant.	**GEN:** Complete Energy Unit Test; organize NB for Energy NB Test tomorrow. **ADV:** Continue Bungee Barbie Lab.				speed of an object. 14. Use models to construct an explanation of how a system of objects may contain varying types and amounts of potential energy. 15. Analyze & interpret data from experiments to determine how various factors affect energy transfer as measured by temperature. 16. Apply the law of conservation energy to develop arguments supporting the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.
F R I	Demonstrate knowledge of energy objectives. Discuss how energy is conserved. Draw energy transformation diagrams. Identify energy transformations that occur in diagrams. Observe changes in energy and that the total energy remains constant.	**GEN BR**: Review questions **ADV BR:** Energy questions **Students will:** **GEN:** Complete Energy NB test; make a new title page & table of contents for Electricity. **ADV:** Finish Bungee Barbie Lab.		**None**		ACOS: 13. Create & analyze graphical displays of data to illustrate the relationships of kinetic energy to the mass and speed of an object. 14. Use models to construct an explanation of how a system of objects may contain varying types and amounts of potential energy. 15. Analyze & interpret data from experiments to determine how various factors affect energy transfer as measured by temperature. 16. Apply the law of conservation energy to develop arguments supporting the claim that when the kinetic energy of an object changes, energy is transferred to or from the object.