

Pickens High School Lesson Planning Template

Grade Level: 9					Teacher/Room: McCoy / 188					Course(s)/ Period(s): Physical Science / 1, 2, 4					Week of: 4/20-24/2015				
Unit Vocabulary: displacement, speed, average speed, instantaneous speed, velocity, acceleration, force, net force, balanced force, inertia, gravity, momentum, weight, kinetic energy, joule, potential energy, chemical potential energy, gravitational potential energy, mechanical energy, law of conservation of energy																			
Instructional Strategies Used: technology, group activities, \$2 summaries, direct instruction, Focused Learning, videos, worksheets, graphic organizers, Quizlet, BrainPop Video Selections, BYOD, lab																			
Day 1				Day 2				Day 3				Day 4				Day 5			
Common Core Standard(s): SPS8. Students will determine relationships among force, mass, and motion. a. Calculate velocity and acceleration. b. Apply Newton's three laws to everyday situations by explaining the following: Inertia Relationship between force, mass and acceleration Equal and opposite forces c. Relate falling objects to gravitational force d. Explain the difference in mass and weight.				Common Core Standard(s) SPS8. Students will determine relationships among force, mass, and motion. a. Calculate velocity and acceleration. b. Apply Newton's three laws to everyday situations by explaining the following: Inertia Relationship between force, mass and acceleration Equal and opposite forces c. Relate falling objects to gravitational force d. Explain the difference in mass and weight.				Common Core Standard(s): SPS7. Students will relate transformations and flow of energy within a system. a. Identify energy transformations within a system (e.g. lighting of a match).SPS8. Students will determine relationships among force, mass, and motion. e. Calculate amounts of work and mechanical advantage using simple machines.				Common Core Standard(s): SPS8. Students will determine relationships among force, mass, and motion. e. Calculate amounts of work and mechanical advantage using simple machines.				Common Core Standard(s): SPS8. Students will determine relationships among force, mass, and motion. a. Calculate velocity and acceleration. b. Apply Newton's three laws to everyday situations by explaining the following: Inertia ,Relationship between force, mass and acceleration, Equal and opposite forces c. Relate falling objects to gravitational force d. Explain the difference in mass and weight. e. Calculate amounts of work and mechanical advantage using simple machines.			
Essential Question: How do you calculate speed, velocity and acceleration?				Essential Question: How do you calculate speed, velocity and acceleration?				Essential Question: How is mechanical advantage calculated?				Essential Question: How is mechanical advantage calculated?				Essential Question: How is mechanical advantage calculated on an inclined plane?			
Mini Lesson: <ul style="list-style-type: none"> go over formulas for speed, velocity and acceleration Activating Strategies: <ul style="list-style-type: none"> http://www.youtube.com/watch?v=MKTA7AAqO0g Lesson: <ul style="list-style-type: none"> Computer Lab to do Gizmo Resource/Materials: <ul style="list-style-type: none"> Handouts 				Mini Lesson: <ul style="list-style-type: none"> scientific method Activating Strategies: <ul style="list-style-type: none"> Introduce Lab Lesson: <ul style="list-style-type: none"> Car Lab Resource/Materials: <ul style="list-style-type: none"> Handouts 				Mini Lesson: <ul style="list-style-type: none"> Energy Card Activitymechanical advantage worksheet Activating Strategies: <ul style="list-style-type: none"> http://www.youtube.com/watch?v=_uLSFigtLKg http://www.youtube.com/watch?v=JsoE4F2Pb20 http://www.youtube.com/watch?v=Y8cuuP4Jmio Lesson: <ul style="list-style-type: none"> Simple Machines PPT with Frayer Model Handouts Resource/Materials: <ul style="list-style-type: none"> Computer, LCD, handouts 				Mini Lesson: <ul style="list-style-type: none"> show how Gizmo works Activating Strategies: <ul style="list-style-type: none"> Kahoot Lesson: <ul style="list-style-type: none"> Mechanical Advantage at the computer Lab Resource/Materials: <ul style="list-style-type: none"> handouts 				Mini Lesson: <ul style="list-style-type: none"> quizlet Activating Strategies: <ul style="list-style-type: none"> BrainPop Lesson: <ul style="list-style-type: none"> Inclined Plane Lab Resource/Materials: <ul style="list-style-type: none"> handouts 			

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	<ul style="list-style-type: none"> cars/ramps/timers 			<ul style="list-style-type: none"> ramps/blocks/spring scales computers
Differentiation: <i>Content/Process/Product:</i> <ul style="list-style-type: none"> Achieve3000 <i>Grouping Strategy:</i> <ul style="list-style-type: none"> individual <i>Assessment:</i> <ul style="list-style-type: none"> \$2 Summary ticket out the door 	Differentiation: <i>Content/Process/Product:</i> <ul style="list-style-type: none"> process/hands-on <i>Grouping Strategy:</i> <ul style="list-style-type: none"> flexible grouping <i>Assessment:</i> <ul style="list-style-type: none"> Lab Report 	Differentiation: <i>Content/Process/Product:</i> <ul style="list-style-type: none"> product <i>Grouping Strategy:</i> <ul style="list-style-type: none"> individual <i>Assessment:</i> <ul style="list-style-type: none"> handouts 	Differentiation: <i>Content/Process/Product:</i> <ul style="list-style-type: none"> Achieve 3000 <i>Grouping Strategy:</i> <ul style="list-style-type: none"> flexible groups <i>Assessment:</i> <ul style="list-style-type: none"> 	Differentiation: <i>Content/Process/Product:</i> <ul style="list-style-type: none"> process-hands on <i>Grouping Strategy:</i> <ul style="list-style-type: none"> flexible groups <i>Assessment:</i> <ul style="list-style-type: none">
Assessment : <i>Pre-Test:</i> <i>Post-Test:</i> <i>Formative:</i> handouts <i>Summative:</i> <i>Performance Based:</i>	Assessment : <i>Pre-Test:</i> <i>Post-Test:</i> <i>Formative:</i> lab report <i>Summative:</i> <i>Performance Based:</i>	Assessment : <i>Pre-Test:</i> <i>Post-Test:</i> <i>Formative:</i> handouts <i>Summative:</i> <i>Performance Based:</i>	Assessment : <i>Pre-Test:</i> <i>Post-Test:</i> <i>Formative:</i> lab report <i>Summative:</i> <i>Performance Based:</i>	Assessment : <i>Pre-Test:</i> <i>Post-Test:</i> <i>Formative:</i> handouts <i>Summative:</i> <i>Performance Based:</i>
Homework: finish worksheets	Homework: finish lab report	Homework: read chapter 4	Homework: review chapters 2, 3 and 4	Homework: work on Final Exam Project

Resources and Reflective Notes: <https://www.youtube.com/watch?v=MAM6LOUnJ80>
<https://www.youtube.com/watch?v=7C7u7kT6EqI>