Name___Skyler Yeargan_____

Lesson Plan Template

Learning Segment Focus: Mechanical energy

Lesson _1_of_2_ Topic: Science Date__5/2/21_____ Grade__6th_____

Student Outcomes

Specific learning **objectives** for this lesson.	• Students will design and construct a model for mechanical energy • Students will be able to define and identify the source of energy being used
Justify how learning tasks are appropriate using examples of **students' prior academic learning**.	• Students will need to know and understand how to build something and the basics of motion
Justify how learning tasks are appropriate using examples of **students' personal, cultural, linguistic, or community assets**.	• Students who understand the ending results will be able to have a clear understanding on how motion works

State Academic Content Standards

List the **state academic content standards** with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	• 6-PS3-5 Construct, use, and present arguments to support the claim that when the kinetic energy of an object changes, energy is transferred to or from the object. • **6-PS3-2**. Develop a model to describe that when the arrangement of objects interacting at a distance changes, different amounts of potential energy are stored in the system.

Key Vocabulary

What **vocabulary terms/content specific terminology** must be addressed for students to master the content?	**Potential energy, mechanical energy, kinetic energy, and motion.**

Academic Language Support

What are the **Academic Language Function(s)** (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan? What planned **Academic Language Supports** will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three **Academic Language Demands (vocabulary, syntax, and discourse)?**	1. Each student will have a copy of the directions on how to do the assignment alongside pictures on how to complete it.

Materials

Materials needed by the teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Provide a video camera, and a projector

Materials needed by **students** for this lesson. (computers, journals, textbook, etc.)	Roller coaster template, extra paper, cardboard box for base, scissors, clear tape, marble

Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	**Teaching & Learning Activities (This should be a BULLETED LIST)**	**Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)**
5	**Introduction**:	2. Tell the students to get into groups of 3 when they are walking into the classroom 3. Explain how we are going to make roller coasters to show how motion works. 4. Go over the instructions for the project
40	**Instruction:**	• The projector will have an example of the creation I have made from the template so the students can look at it. • The students will follow the instructions for the class and make the roller coaster. • When the students are done, they will video tape their roller coaster in action on the camera I provide.
5	**Closure:**	• At the end of class, I will ask the students to write what the kinetic energy is and the potential energy from their roller coaster.

Technology Integration

Provide your **rationale** for your technology choices that accurately reflects those choices within your teaching context. **Identify** what technology(s) you are using as part of your lesson plan. **Describe** how the use of technology aligns to your learning objectives, content standards, and central focus. **Explain** how technology-based instructional strategies are essential to students accomplishing the learning objectives (beyond what could be accomplished without using the technology). **Specify** how the technology selections meet or exceed the needs/strengths of all students**. Justify the "fit"** of chosen technologies, showing how the content, instructional strategies, and technology "fit" together.	**I used a video camera for the students to record their creations in action. I also used a projector to show the students an example of the project I have made so they have something to go by.**

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.)	• Since students are in groups, they will be helping each other out. However, I will provide pictures and cognates in the instructions.

Differentiation

How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) **to ensure all student needs are met?** (All students who are not on specific plans mandated by federal and state law.)	• This is a fun student driven assignment. Students will get what they need if they require it.

Assessments: Formative and/or Summative

Describe the **tools/procedures** that will be used in this lesson to monitor students' learning of the lesson objective(s) (include type of assessment & what is assessed).	☐ Formative /x Summative	Students creating and building the roller coaster
	x Formative /☐ Summative	The short summary the student wrong.
	☐ Formative /☐ Summative	

Research/Theory

Explain **connections to theories and/or researc**h (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using **principles of the connected**	n/a

theories and/or research.	

Lesson Reflection/Evaluation

What went **well**? What **changes** should be made? How will I **use assessment data** for next steps?	*TO BE FILLED IN AFTER TEACHING*

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us; http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx; http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx;https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf; https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf; https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx; https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx; https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx