MVSU NCLB 2017 Summer Reading Institute Lesson Plan Template

Name:	Name of Unit:	Date:	Grade Level:
Joelle Stuart	Locomotive	Day 1	5 th
Objective	Procedures	Materials	Evaluation
5. 2d. Categorize	Day One:	Text:	Observe
examples of	Duy one.	Locomotive	students as
potential energy	Essential Question: How can potential energy be changed to kinetic energy?	200011101170	they work.
as gravitational	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Listen for oral
(e.g., boulder on a	Anticipatory Set:		responses
hill, child on a			Check
slide), elastic (e.g.,	The teacher will: Place a chair in front of the class. Called a student to the		students'
compressed	front and ask him or her to have a seat. Ask the students state what the student	Chair	work
spring, slingshot,	is doing. Call another student up and asked him or her to jog in place. Pose		
rubber band), or	the same question. Begin a discussion by asking students questions such as		
chemical (e.g.,	"What is energy? Where does energy come from? How many kinds of energy		exit tickets
unlit match,	are there? What are the different kinds of energy?"		
food). (DOK 2)			
Essential	Introduction:		Journal
Questions			writing
	The teacher will show the class the following video:		
***What is	Pose questions throughout the video using the following questions to ensure		Reading log
energy?	students gathered what they needed from the video.		
	1. What kind of energy is stored or not being used at the moment?		Teacher made
****Where does	(Potential energy)	Kinetic and	test
energy come	2. What is an example of Potential Energy? (example response: ball on	Potential	
from?	top of a hill, a water balloon)	Energy You Tube	
*****How many	What is energy that is in motion? (Kinetic energy)What is an example of Kinetic Energy? (example response: ball	You Tube	
kinds of energy			
are there?	rolling down a hill, when the water balloon pops)	YouTube:	
מוס נווסוט!	Guided Practice:	Kinetic and	
*****What are the	Hand out 1 rubber band to each student teacher ask students to demonstrate	Potential	
different kinds of	Potential Energy with the rubber band (the students should pull the rubber	Energy	
energy?	band tight, to show that it is energy in waiting or is stored). After showing	Lifeigy	
onorgy.	Potential energy the teacher should ask students to demonstrate Kinetic		

energy with the rubber band (the students should let the rubber band snap/fly across the room/hit the desk/etc to show that the rubber band is energy in motion or when the energy is released. Practice two or more times. Say potential energy. Everyone should stretch their rubber band in their hand and ready to go. Then say 'Kinetic energy!' and everyone releases their rubber band. Discuss other examples of potential and kinetic energy in the classroom. A pencil and a blank piece of paper are potential. Then when you pick up the pencil and start writing on it, this is now kinetic. Have students come up with ideas.

Work Period:

The teacher will: Divide students into groups. Distribute investigation-data sheets to each student. Explain to students that today they will visit stations that will provide them with the opportunity to examine how various changes in potential energy affects the kinetic.

Have students complete the activities at each station. (Directions will be written on poster boards for each station.)

Independent Practice:

Have students complete interactive notebook potential and kinetic energy activity to reserve for future use.

Closure:

The teacher will: Review the lesson in its entirety. Ask and answer questions to ensure understanding. Discuss the activities completed during the work period.

Have students complete exit tickets to demonstrate today's lesson content. **Reteach:** Have students roleplay examples of potential and kinetic energy.

Enrichment: Create a powerpoint on potential and kinetic energy.

Rubberbands

It's All About
That Energy
Activity sheet
Balls
Balloons
Rock
Pebble
Empty soda
can

Composition notebook' Flip Flap Foldable

5. 2d. Categorize Day Two: Observe examples of students as potential energy What is the relationship between potential and kinetic energy? they work. as gravitational Listen for oral (e.g., boulder on a **Anticipatory Setting:** responses hill, child on a Check slide), elastic (e.g., The teacher will show a video of roller coaster: ask students what is Video students' compressed Roller Coaster happening? work spring, slingshot, http://www.sciencechannel.com/video-topics/engineeringhttp://www.sc rubber band), or construction/machines-rollercoaster/ iencechannel. chemical (e.g., Using the video and the previous day's lesson have students respond to the com/videofollowing question on index cards: What is the relationship between potential unlit match, topics/enginee exit tickets and kinetic energy? ringfood). (DOK 2) Essential construction/ **Questions** The teacher will review the previous day's lesson. Have students record on machines-Journal ***What is an entrance/exit ticket what potential and kinetic energy are and explain rollercoaster/ writing energy? examples of each. Explain today's activity. Distribute potential and kinetic energy practice sheet. Have students complete sheet for quick review. Show Reading log ****Where does the students the two different cars that will be used in the activity. Tell Potential and energy come students that today they will learn how to will use determine how a change in Kinetic from? potential energy can affect the amount of kinetic energy an object will have. Energy Introduce and explain the potential energy equation, Pe= Worksheet *****How many (mass)(gravity)(height). Explain that the gravitational pull on Earth is always 9.81 meters per second squared. Provide students with data to practice using kinds of energy are there? the formula. Investigation Activity sheet *****What are the **Guided Practice** Toy cars different kinds of Race track energy? The teacher will divide the students into two groups. (There will be two identical tracks set up on opposite sides of the classroom, and two heights will be tested at each track. (.25m-1m). Investigation Activity sheet Explain to students that each of the two groups will run both cars at each height, and answer whether or not the car went all the way through the loop. After the activity is complete, have students return to their desk. Introduce the tennis balls potential energy equation to the students. Tell the class what each car weighs. Remind students that the gravitational pull on Earth is always 9.81 meters per Rubberbands second squared. It's All About

	Explain to students that today they will design and carry out an investigation to examine how a change in the amount of potential energy affects the amount of kinetic energy that object will have once it reaches the ground. Distribute a set of materials in which students can test the effect of potential energy on kinetic energy using their supplies. Distribute handout for students to follow the procedure to complete the exercise. Independent Practice: The teacher will have students used information compiled in guided practice to use formula to explain how the amount of potential energy can affect kinetic energy. Closure: The teacher will review the lesson in its entirety. Ask and answer questions to ensure understanding. Have students complete exit tickets by responding to the following questions: "What did you notice about the relationship between potential and kinetic energy?" Reteach: Use tennis balls and have students drop them from different heights to test relationship between potential and kinetic energy. Enrichment: Write a story to explain the relationship between potential and kinetic energy. Use various objects as characters.	That Energy Balls Balloons Rock Pebble Empty soda can Composition notebook' Flip Flap Foldable	
5. 2d. Categorize examples of	Day Three:		Observe students as
potential energy as gravitational	What are the different forms of energy?		they work. Listen for oral
(e.g., boulder on a hill, child on a	Anticipatory Setting:		responses Check
slide), elastic (e.g., compressed spring, slingshot,	The teacher will have students read the six charts labeled mechanical, chemical, electrical, sound, heat and light that have be placed around the room. Asked students do they know what each is about. Illicit the response		students' work

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rubber band), or	that they are the six types of energy.	Charts	with	** ** ** *
chemical (e.g.,		forms	of	exit tickets
unlit match,	Introduction:	energy		
food). (DOK 2)		heading.		T 1
Essential	The teacher will review the previous day's lesson. Explain to students that			Journal
Questions	today they will learn about the different forms of energy. Tell students that			writing
***What is	before there is a discussion about it they will try to figure examples of each.			D 1' 1
energy?				Reading log
****Where does	Divide the class into groups Distribute to each seignors, tone and pictures			
	Divide the class into groups. Distribute to each scissors, tape and pictures. Instruct students to discuss with their group mates what form of energy they			
energy come from?	believe is portrayed in each of their pictures and tape it on the appropriate			
HOIT!	chart. Have groups explain why they put each picture under the form of			
****How many	energy they chose.			
kinds of energy	energy they chose.			
are there?	Discuss with students the different forms of energy and provide examples.			
are triere.	Have students now make changes to the charts if needed.			
*****What are the	That o stadents now make changes to the charts it needed.			
different kinds of	Work Period:			
energy?				
3,1	Guided Work:			
	The teacher will explain to groups they are going to complete activities that			
	will give them an opportunity to demonstrate their knowledge of the different			
	forms of energy. Tell students today they will choose which activity they			
	want to complete to demonstrate an understanding of the different form of			
	energy. Tell students to feel free to ask questions of their peers or teacher if			
	they need assistance.			
		Scissors,		
	Explain to students that they can scan magazines to find examples of each	tapes, pic	tures	
	form of energy, complete a sorting activity to differentiate between the			
	different forms of energy, write a report on the different types of energy, or			
	complete an assignment answering questions about the different forms of			
	energy.	Magazine		
		Forms	of	
	Independent Work:	energy so	orting	
		activity		
	Distribute a teacher-made booklet to the students. Explain to the students that			
	for the remainder of the day and at home, they will list when and how they			

	use various forms of energy.		
	Closing:	Teacher-made booklet	
	The teacher will review the lesson in its entirety. Ask and answer questions to ensure understanding. Have students meet with a peer and discuss the different forms of energy and which one they think is used the most. Have volunteers share their consensus with the class. Have students complete exit	Rubberbands	
	tickets explaining how today's less will be beneficial to them.	It's All About That Energy	
	Reteach:	Balls Balloons	
	Ask your students to draw the following actions they do every day. The actions are sitting, eating, stretching, sleeping, standing and bathing. Ask your students to write the energy used in these actions next to the picture.	Rock Pebble Empty soda can	
	Enrichment:	Composition	
	Ask your students to think about their after-school routine. Tell them to list five actions they take between the end of school and bedtime. Remind them to include whether they used potential or kinetic in each action.	notebook' Flip Flap Foldable	
5. 2d. Categorize	Day Four:		Observe
examples of			students as
potential energy	Essential Question: How can mechanical energy as potential energy become		they work. Listen for oral
as gravitational (e.g., boulder on a	kinetic energy?		responses
hill, child on a	Anticipatory Setting:		Check
slide), elastic (e.g.,			students'
compressed	The teacher will have students attempt to determine which form of energy is		work
spring, slingshot,	potential energy and which type is kinetic energy.		
rubber band), or chemical (e.g.,	Introduction:		exit tickets
unlit match,	introduction.		CAIL HERCIS
food). (DOK 2)	The teacher will review potential and kinetic energy. Review the different		
Essential	forms of energy. Explain to students that chemical and mechanical energy are		Journal
Questions	examples of potential energy. Discuss why this is so. Explain that heat, light,		writing
***What is energy?	sound, and electrical energy are examples of kinetic energy. Discuss why this is so.		

****Where does energy come	Work Period:		
from?	Guiding Practice:		
*****How many kinds of energy are there?	The teacher will have students complete task card activities to review forms of energy. Discuss responses with students. Independent Practice:		
*****What are the different kinds of	Have students complete close reading activity.		
energy?	Closure:	Task cards	
	The teacher will review lesson in its entirety. Ask and answer questions to ensure understanding. Have students write a brief paragraph explaining what they learn and how this information can be beneficial to them. Reteach: Have students match the potential energy to its form of energy and	Close	
	the related picture.	Reading Activity	
	Enrichment: Write an article explaining the forms of energy and how they relate to potential and kinetic energy.		

	Day Five:	Observe
5. 2d. Categorize		students as
examples of	Anticipatory Setting	they work.
potential energy		Listen for oral
as gravitational	The teacher will play a game entitled "It's that Form" in which students name	responses
(e.g., boulder on a	an example for form of energy and another student identify the form.	Check
hill, child on a		students'
slide), elastic (e.g.,	Introduction	work
compressed		Grade
spring, slingshot,	The teacher will review the previous day's lesson. Ask and answer questions	Assessments
rubber band), or	to ensure understanding. Explain to students that today they will complete an	
chemical (e.g.,	assessment to demonstrate mastery of lesson.	

unlit match, food). (DOK 2) Essential	Guided Practice:		Reading log
Questions ***What is	The teacher will provide sample items for practice prior to assessment.		Teacher made test
energy?	Independent Practice		
****Where does energy come from?	Have students complete assessment activity to demonstrate mastery of standards.		
*****How many	Closure:		
kinds of energy are there?	The teacher will review the lesson in its entirety. Ask and answer questions to ensure understanding. Have volunteers share what they have learned. Have students complete Count Down Activity in which they write down three	Teacher-Made	
*****What are the different kinds of energy?	things they have learned.	Assessment	

For each lesson plan, do the following:1). Identify the domain2). Align with the standards

3). State the benchmark 4). Address diversity 5). Infuse technology