

Unit Title:	Lab Safety
Unit Vocabulary:	Beaker, Graduated cylinder, Erlenmyer flask, Test tube, Test tube rack, Test tube holder, Bunsen burner, Tongs, Heat-resistant gloves, Ring stand and ring, Pipette, Forceps, Triple beam balance, Digital scale, Thermometer, Spring scale, Googles, Metric ruler, spring scale, pipette/dropper
Upcoming Common Assessments (MasteryConnect):	Lab Safety Quiz on 8/22

Teachers: Taylor, Dando, Blasabas Grade/Subject: Science 8

Standard(s) + Learning Objective	Activating Experience	Learning Experience	Formative or Summative	Summarizing Experience	WICOR, AVID and/or ELLevation
	(Opening, may include	(Work Time: SB Materials and Resources, Vocab, Scaffolds/Supports, SWRL, Costas)	Assessment(s)	(Closing)	Strategies
	"Scholar Starter")				(aligned with learning objective)

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Standard (write out):

N/A

Learning Objective

Skill (what), Content (why), Product (how):

The scholars can understand what are safe practices in a lab setting and why they are important by watching videos and participating in guided discussions.

Lab Safety
Scenarios: Identify
all of the mistakes
and violations of
rules within the
lab setting. Follow
with
think-pair-share
then class
discussion of
answers (15)

Standards Based Materials & Resources:

Students explore activities involving lab safety and proper behavior and equipment use while in lab

- 1. Amoeba Sisters Lab Safety Video (6)
- 2. Safety Procedures in the Laboratory
 Presentation (10)
- Students review and sign safety contract
 (5)

Content/Academic Vocabulary:

Lab safety; googles, gloves, aprons, safety equipment, safety symbols

ILAP/IEP/504 Scaffolds & Supports:

Visuals (video and worksheet and presentation; collaborative learning; spanish captions on video; peer collaboration and graphic organizer with visuals.

Opportunities to SWRL:

Think-Pair-Share; written responses on video recap worksheet; reading scenarios

Costa's Levels of Thinking/Questioning:

Level 1: What are the safety rules in the science laboratory?

Level 2: How would you handle a situation where a glassware breaks?

Level 3: A scholar pours a chemical solution into a beaker without wearing gloves, as a lab supervisor, what strategies and disciplinary actions would you implement to ensure every scholar always uses proper personal protective equipment (PPE) properly?

Formative: Have scholars show yes/no examples of lab safety in the document and properly identify safety symbols on the worksheet.

Amoeba Sisters Video Recap Worksheet (10) W - written responses on video recap and lab safety scenarios starter

- I identifying what is wrong in the safety scenarios documentsC - think pair share with scenarios;
- O materials are organized in scholar AVID binder (use 5th tab)
- R safety scenarios reading

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T	Standard (write out):	Activate prior	Standards Based Materials & Resources:	Sentence frame activity to identify	<u>Lab</u> <u>Safety/Equipmen</u>	W - close I - activating prior
T	N/A	knowledge: Scholars	Scholars view lab equipment presentation. The	the functions of	t Review	knowledge
U	Learning Objective	identify as many	teacher will go over proper lab equipment handling and usage. Scholars complete frame activity,	lab equipment	<u>t review</u>	C - gallery walk
E	Skill (what), Content (why), Product (how):	science tools as they	participate in a gallery walk of equipment, and	and review lab	Lab Equipment &	O - avid binder
S	(wily), Product (llow).	can from those	complete the exit ticket/close.	equipment terms	Safety Exit/Close	R - sentence frames
D	The scholars will be	<u>pictured</u> . Review	1. Types of Lab Equipment (10)			
A	proficient in the use of	answers after the	Review answers after the presentation, how many		<u>Liveworksheet -</u>	
Y	proper laboratory	presentation, how	did you recall?		<u>Laboratory</u>	
	equipment by	many did you recall?	2. <u>Lab Safety/Equipment Review</u> (10)		<u>Equipment</u>	
	identifying them	(10)	3. Lab Equipment Gallery Walk (15)			
	correctly in order to use		4. Lab Equipment & Safety Exit/Close (7)			
	them effectively and safely in labs.					
	Salely III labs.		Content/Academic Vocabulary:			
			Beaker, graduated cylinder, erlenmeyer flask, test			
			tube, holder & rack; tongs, heat resistant gloves;			
			ring stand and ring; pipette; forceps, triple beam			
			balance, digital scale; thermometer, spring scale,			
			goggles.			
			8-86			
			ILAP/IEP/504 Scaffolds & Supports:			
			Activating prior knowledge; visuals; word bank;			
			manipulatives; peer collaboration; sentence stems			
			Opportunities to SWRL:			
			Collaboration; close writing; sentence frames			
			Costa's Levels of Thinking/Questioning:			
			Level 1: What does a thermometer measure? What does			
			a graduated cylinder measure?			
			Level 2: How is a beaker different from a test tube?			
			Level 3: Imagine your friend is using a tool the wrong			
	Charlend	Dovious Lab	way. What would you do to help them stay safe?	Lab Cardo	Lab Fauir	W 1 nager
**7	Standard (write out):	Review: Lab	Standards Based Materials & Resources:	<u>Lab Equipment</u>	Lab Equipment Group Sort	W - 1 pager I - 1 pager research
W	N/A	Equipment (5)	Review lab safety rules by reading story and finding lab as fate middles.	Group Sort	Challenge	C - group sort
E	Learning Objective		and finding lab safety mistakes	<u>Challenge</u> (10)	Similaringe	O - avid binder
D	Skill (what), Content (why), Product (how):		SpongeBob Lab Safety Worksheet (15)	Cala alama (11)	<u>Liveworksheet -</u>	R - lab safety
N	(2. <u>Lab Equipment 1-Pager Template</u> (20)	Scholars will	<u>Laboratory Safety</u>	worksheet
E	The scholars will be		3. <u>Lab Equipment Group Sort Challenge</u> (10)	show what	<u>Rules</u>	
S	able to apply what			they have		
D	they have learned		Content/Academic Vocabulary:	learned by		
A	about lab safety rules		Safety rules, lab equipment: beaker, metric ruler,	completing the		
	•	I		1		

\mathbf{V}	by identifying lab		triple-beam balance; graduated cylinder; flask;	science		
1	safety mistakes and		metric ruler; test tube; test tube holder;	equipment		
	•			-		
	identifying uses of		microscope; spring scale; pipette/dropper	sort.		
	lab equipment.					
			ILAP/IEP/504 Scaffolds & Supports:			
			Visuals on sort and review; cooperative learning;			
			manipulatives; vocabulary development; word			
			bank; shortened responses on 1-pager			
			Opportunities to SWRL:			
			Collaborative activities; 1-pager; lab safety reading			
			conditional treatments, in pager, has surety reducing			
			Costa's Levels of Thinking/Questioning:			
			Level 1: What should you do if there is a spill in the lab?			
			Level 2: What could happen if someone heats a chemical			
			without wearing gloves?			
			Level 3: If someone mixed two chemicals without asking			
			the teacher, what problems might happen?			
	Standard (write out):	Pictures of lab gone	Standards Based Materials & Resources:	successful	Jeopardy	W-activating
T		wrong - scholars	1. BioNetwork Lab Safety - Interactive	completion of lab	, , , , , , , , , , , , , , , , , , ,	activity/level of
H	N/A	discuss with	Review (25)	safety interactive		thinking questions
	Learning Objective Skill (what), Content		2. Lab Safety & Equipment Jeopardy (15)			I - Safety Interactive
U	(why), Product (how):	his/partner what lab	https://jeopardylabs.com/play/lab-safety			C - jeopardy teams
R		safety is violated	-and-equipment			O-avid binder
S	The scholars will be	based on the picture	https://jeopardylabs.com/play/lab-safety			R - safety interactive
D	able to demonstrate		-jeopardy			
A	their understanding					
Y	of lab safety rules		Content/Academic Vocabulary:			
	and equipment by		Beaker, Graduated cylinder, Erlenmyer flask, Test			
	participating in a lab		tube, Test tube rack, Test tube holder, Bunsen			
	safety and		burner, Tongs, Heat-resistant gloves, Ring stand and			
	equipment Jeopardy		ring, Pipette, Forceps, Triple beam balance, Digital			
	game and completing		scale, Thermometer, Spring scale, Googles, Metric			
	an interactive safety		ruler			
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	lab activity.		WAR (150 / 50 / 6 / 1 / 0 6 / 1			
			ILAP/IEP/504 Scaffolds & Supports:			
			Collaboration; visuals; answer wh-questions			
			Opportunities to SWRL:			
			Jeopardy - S & R; L - Safety interactive;			
			collaboration - jeopardy teams			
			Conductation - Jeopardy teams			
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		Costa's Levels of Thinking/Questioning:			
		Level 1: What is the purpose of wearing goggles in the lab? Level 2: Why is it important to tie back long hair during an experiment? Level 3: How would you respond if a classmate broke a			
		glass beaker and didn't report it?			
F R I D A Y	Standard (write out): N/A Learning Objective Skill (what), Content (why), Product (how): The scholars will be able to show mastery of lab safety PRIOR to engaging in any lab-related activity by scoring at least an 80% on the lab safety assessment - Lab Safety and Equipment Quiz	Standards Based Materials & Resources: Quiz in Mastery Connect Vocabulary Graphic Organizer Content/Academic Vocabulary: Beaker, Graduated cylinder, Erlenmyer flask, Test tube, Test tube rack, Test tube holder, Bunsen burner, Tongs, Heat-resistant gloves, Ring stand and ring, Pipette, Forceps, Triple beam balance, Digital scale, Thermometer, Spring scale, Googles, Metric ruler, spring scale, pipette/dropper ILAP/IEP/504 Scaffolds & Supports: ML Scholars will receive a paper with two answer choices marked out. Scholars Opportunities to SWRL: Reading quiz ques; written vocabulary Costa's Levels of Thinking/Questioning: Level 1: Level 2:	Summative: Lab Safety Quiz Unit 1 Vocabulary Chart - copy, add visuals and add to unit 1 tab in binder	N/A	W - vocabulary I C O - binder R - vocab w/visuals
		Level 1:			