

STEM Phenomena Lesson Plan Rubric

Semi-Anonymous ID: _____ Evaluator: _____ Total Score: _____/51

Category	0	1	2	3	Weight*
Objectives and Standards	Objectives and/or standards to match each major component of the lesson are missing.	Some standards may be misidentified. Objectives are included and generally match most major components of the lesson, or objectives are included but they are not of high quality.	Objectives and standards are included to match major components of the lesson. Objectives may not be one of the following: specific, measurable, achievable, relevant, or tailored.	Objectives are included to match major components of the lesson and are correctly aligned to the standards. Objectives are of high quality, specific, without ambiguous language, measurable, achievable within the scope of the lesson, relevant, and tailored to the lesson.	x1
Materials	None of the following are true: <ul style="list-style-type: none"> • All materials are listed. • All resources are identified. • All materials are appropriate for lesson. • Necessary handouts, links, slideshows, etc. are included. 	One-two of the following is/are true: <ul style="list-style-type: none"> • All materials are listed. • All resources are identified. • All materials are appropriate for lesson. • Necessary handouts, links, slideshows, etc. are included. 	Three of the following are true: <ul style="list-style-type: none"> • All materials are listed. • All resources are identified. • All materials are appropriate for lesson. • Necessary handouts, links, slideshows, etc. are included. 	All of the following are true: <ul style="list-style-type: none"> • All materials are listed. • All resources are identified. • All materials are appropriate for lesson. • Necessary handouts, links, slideshows, etc. are included. 	x1
Procedure	None of the following are true: <ul style="list-style-type: none"> • Lesson outlines all steps that will be taken in order to implement the lesson. • Lesson is easily understood. • Lesson clearly provides detailed timing for each step. • Lesson provides vivid, 	One-two of the following is/are true: <ul style="list-style-type: none"> • Lesson outlines all steps that will be taken in order to implement the lesson. • Lesson is easily understood. • Lesson clearly provides detailed timing for each step. • Lesson provides vivid, 	Three-four of the following are true: <ul style="list-style-type: none"> • Lesson outlines all steps that will be taken in order to implement the lesson. • Lesson is easily understood. • Lesson clearly provides detailed timing for each step. • Lesson provides vivid, 	All of the following are true: <ul style="list-style-type: none"> • Lesson outlines all steps that will be taken in order to implement the lesson. • Lesson is easily understood. • Lesson clearly provides detailed timing for each step. • Lesson provides vivid, detailed explanation of 	x3

	<p>detailed explanation of all steps in lesson so someone else could step in and implement the lesson with no difficulty.</p> <ul style="list-style-type: none"> STEM phenomena is the central focus of the lesson. 	<p>detailed explanation of all steps in lesson so someone else could step in and implement the lesson with no difficulty.</p> <ul style="list-style-type: none"> STEM phenomena is the central focus of the lesson. 	<p>detailed explanation of all steps in lesson so someone else could step in and implement the lesson with no difficulty.</p> <ul style="list-style-type: none"> STEM phenomena is the central focus of the lesson. 	<p>all steps in lesson so someone else could step in and implement the lesson with no difficulty.</p> <ul style="list-style-type: none"> STEM phenomena is the central focus of the lesson. 	
Hook/ Opening	<p>A process for the lesson introduction is limited or missing.</p>	<p>The lesson was introduced by stating the instructional objective or focus, or the lesson was introduced by using a warm up or other device. Hook is included but may not be motivational or engaging.</p>	<p>A lesson introduction is specifically described, including a motivational device, connection to prior learning, or connection to objectives, standards and essential questions.</p>	<p>An engaging process for the lesson introduction is specifically described, including a strong motivational device, connection to prior learning, and/or connection to objectives, standards and essential questions.</p>	x1
Strategies for Instruction	<p>A single strategy is used that may not allow for independent or collective construction of knowledge accurately.</p>	<p>A single, effective strategy is employed in a way that ensures that students are able to construct accurate understanding of concepts.</p>	<p>Suitable strategy/ies is/are used to promote active learning and that allows for variation in activity, including independent and collective exploration of content. More than one representation of concept is included.</p>	<p>Multiple strategies (direct instruction, group work, kinesthetic learning, project based learning, etc...) are used to engage individuals and groups in high performance and mastery through active learning. Strategies not only lead to knowledge of content but development of problem solving skills.</p>	x1
Differentiation and Modification	<p>No modifications included.</p>	<p>Include vague modifications for special needs students, learning styles, English Language Learners and other anticipated problems.</p>	<p>Include some modifications for diverse learners special needs students, learning styles, English Language Learners and other anticipated problems you may encounter and how to solve them.</p>	<p>Includes detailed modifications for diverse learners, special needs students, learning styles, English Language Learners and other anticipated problems you may encounter and how to solve them.</p>	x1
Assessment	<p>None of the following are</p>	<p>One of the following is true:</p>	<p>Two of the following are true:</p>	<p>All of the following are true:</p>	

	<p>true:</p> <ul style="list-style-type: none"> Lesson includes both summative and formative assessments. The content assessed exactly matches the content described in the objectives and description of the lesson. Scoring guides or rubrics are provided if appropriate. 	<ul style="list-style-type: none"> Lesson includes both summative and formative assessments. The content assessed exactly matches the content described in the objectives and description of the lesson. Scoring guides or rubrics are provided if appropriate. 	<ul style="list-style-type: none"> Lesson includes both summative and formative assessments. The content assessed exactly matches the content described in the objectives and description of the lesson. Scoring guides or rubrics are provided if appropriate. 	<ul style="list-style-type: none"> Lesson includes both summative and formative assessments. The content assessed exactly matches the content described in the objectives and description of the lesson. Scoring guides or rubrics are provided if appropriate. 	x1
Closing	<p>None of the following are true:</p> <ul style="list-style-type: none"> Lesson includes procedures for closing the lesson and/or transitioning to the next activity. Students (rather than instructor) reflect and summarize the lesson. Objectives and key points are reviewed. 	<p>One of the following is true:</p> <ul style="list-style-type: none"> Lesson includes procedures for closing the lesson and/or transitioning to the next activity. Students (rather than instructor) reflect and summarize the lesson. Objectives and key points are reviewed. 	<p>Two of the following are true:</p> <ul style="list-style-type: none"> Lesson includes procedures for closing the lesson and/or transitioning to the next activity. Students (rather than instructor) reflect and summarize the lesson. Objectives and key points are reviewed. 	<p>All of the following are true:</p> <ul style="list-style-type: none"> Lesson includes procedures for closing the lesson and/or transitioning to the next activity. Students (rather than instructor) reflect and summarize the lesson. Objectives and key points are reviewed. 	x1
Originality	Activity is dated and likely to have been done by learners in another class.	The lesson is interesting but is not a unique idea.	The lesson is interesting, challenging, and motivating, and puts a unique spin on an "old" activity.	The lesson is very interesting, challenging, and motivating for learners. The activity is not likely to have been done before by learners.	x2
Pictures or sample work	Lesson does not include any pictures of samples of student work.	Lesson includes generic photos that enhance the lesson plan but are not specific to the student work in the lesson plan.	Lesson includes at least 1 photo specific to the learning environment (when appropriate) or of sample student work.	Lesson includes multiple photos including sample work and learning environment (when appropriate) that allow anyone teaching this lesson to better understand the lesson.	x1

STEM Phenomena	The lesson does not involve STEM Phenomena.	The lesson involves some STEM phenomena, but primarily involves traditional worksheets or online assignments.	The lesson involves a significant amount of STEM phenomena being incorporated into lesson plan, but the lesson may also include some traditional worksheets or online assignments.	The lesson is predominately based on STEM phenomena, which significantly contributes to overall student learning.	x2
Engagement	Students are unengaged throughout the lesson.	Students are actively engaged for small parts of the lesson.	Students are actively engaged through most of the lesson.	Students are actively engaged through fun, interesting practices throughout the entire lesson	x2

The 0-3 score for each criterion will be multiplied by the multiplier number in the final column then added together to find the final score.