

# LCM Scoring Guide

## For STEP lessons

<b>Descriptor</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
<p><b>Standards Based</b> Lesson identifies the appropriate GLEs for the science concept written. At least one-math or language arts GLE also included.</p>	GLEs and science concept not identified or incorrectly identified.	GLEs identified. Science concept is not identified or is not developmentally appropriate.	GLEs identified. Math or language arts GLE connected to the lesson. Science concept identified.	GLEs identified and specifically related to lesson. Science concept is clearly identified and related to lesson.
<p><b>Scoring Guide/Rubric</b> Assessment is done using a scoring guide/rubric with objectives and descriptors identified.</p>	No scoring guide/rubric or assessment task evident	Incomplete objectives or imprecise descriptors (some, always, a lot). Assessment task of science concept and GLEs is missing or does not reflect GLE.s	Objectives and descriptors identified and quantified by number, percentage, etc. Assessment task measures science concept and minimal GLE proficiencies.	Objectives and descriptors clearly identified and quantified for all GLEs listed. Assessment task measures science concept and achievement beyond minimal GLE proficiencies.
<p><b>Explore</b> Hands-on, minds-on activity that provides discovery of a newer explanation of an event or concept.</p>	No manipulation of materials or inquiry evident.	Manipulation of materials but the inquiry is teacher guided only.	Manipulation of materials with an investigation by student. There is shared inquiry between teacher and student. There is documentation of learning (worksheet, graph, diagram, map, etc).	Manipulation of materials with an investigation that includes cooperative learning. Inquiry is shared between teacher and student. There is documentation of learning (worksheet, graph, diagram, map, etc).
<p><b>Generalize</b> Questioning strategies help students to verbalize new explorations. Questions are asked that could be tested</p>	Questioning strategies not evident and no open-ended questions asked; uses lecture to explain science	Questioning strategies used and one or fewer open-ended questions asked.	Questioning strategies used to clarify and determine student understanding of listed science concept. Two	Questioning strategies used to clarify, determine student understanding of listed science concept, and

later.	concept.		open-ended questions asked. A testable question may be generated.	compare new understandings to original preconceptions about science concept. Two or more open-ended questions asked. A testable question may be generated.
<b>Experiment</b> Directions given for students to design an experiment (fair test).	No directions given by teacher for students to develop testable question and experimental design not evident and/or unrelated to informal loop exploration.	Directions given by teacher for students to develop testable question(s) and experimental design are unclear. Experiment may be connected to informal loop exploration.	Directions given by teacher for students to develop testable question(s), an experimental design that controls the variables, and includes data collection and display (graph, chart, etc.) Has connection to the informal loop explorations.	Directions given by teacher for students to develop testable question(s), a repeatable experimental design that controls the variables, and includes data collection and display (graph, chart, etc.). Has connection to the informal loop explorations.
<b>Interpret</b> Questioning students about collected data and displays.	Questions that compare results to student predictions not evident.	Questions that compare results to student predictions are unclear.	Questions that compare results to student predictions and draw a conclusion.	Questions that compare results to their predictions and draw a conclusion. Designs new testable questions as spin off or for further verification
<b>Apply</b> Students apply the newly learned science concept. Activities should help recognize universal nature of concept.	No opportunities or activities for students to use new concepts and skills learned in a new way.	Encourage students to use new concepts and skills in new ways. New terms and definitions may be presented.	Encourages students to use new concepts, skills, definitions, and terms in new ways. Documents student ability to use concept out of original context.	Encourages students to use new concepts, skills, definitions, and terms in new ways. Documents student ability to use concept out of original context. Notes additional explore and generalize sessions that are needed.