

Figure 10. Rubric of benchmarks, teacher objectives, specific activities, and assessment scoring.

Relevant standards from <i>Benchmarks for Science Literacy for grades 9–12</i> (AAAS 1993)	Objectives Students will be able to:	Specific activities assessed Students:	Met	Partly Met	Not Met
Chapter 12, Habits of Mind, D, Communication Skills: Use tables, charts, and graphs in making arguments and claims in oral and written presentations.	Use a dichotomous key to determine insect anatomical features	Listed the characteristics of an assigned insect by following the dichotomous key in reverse			
		Determined if the insect model of another group featured the correct anatomy, providing written feedback			
Chapter 5, The Living Environment, A, Diversity of Life: The degree of kinship between organisms or species can be estimated from the similarity of their DNA sequences, which often closely matches their classification based on anatomical similarities.	Determine the identity of an insect model using a dichotomous key	Keyed out an insect model of a previous group of students using a dichotomous key			
Chapter 5, The Living Environment, F, Evolution of Life: Natural selection leads to organisms that are well suited for survival in particular environments.	Describe anatomical features of an insect that help it survive in a particular environment	Researched information on evolutionary adaptations for habitat on an assigned insect, reporting at least five adaptations to the class			

<p>Chapter 12, Habits of Mind, C, Manipulation and Observation: Use power tools safely to shape, smooth, and join wood, plastic, and soft metal.</p>	<p>Use tools to create an insect model from recycled items that displays correct anatomical features</p>	<p>Combined recycled plastic items using tools (scissors, glue gun, cording) safely to make a correct, well-constructed, realistic model of an assigned insect</p>			
<p>Chapter 8, The Designed World, B, Materials and Manufacturing: Scientific research identifies new materials and new uses of known materials.</p>	<p>Recycle items commonly discarded to make an insect model</p>	<p>Assembled an insect model by finding new and creative uses for recycled items</p>			
<p>Chapter 12, Habits of Mind, D, Communication Skills: Participate in group discussions on scientific topics by restating or summarizing accurately what others have said, asking for clarification or elaboration, and expressing alternative positions.</p>	<p>Work cooperatively as a small group in making an accurate insect model</p>	<p>Completed the assigned tasks related to insect models cooperatively, discussing ideas and differences in an orderly, thoughtful manner</p>			