

# Appendix A: The 5E Model of Instruction

5E Definition	Teacher Behavior	Student Behavior
<b>Engage</b>		
<ul style="list-style-type: none"> <li>• Generate interest</li> <li>• Access prior knowledge</li> <li>• Connect to past knowledge</li> <li>• Set parameters of the focus</li> <li>• Frame the idea</li> </ul>	<ul style="list-style-type: none"> <li>• Motivates</li> <li>• Creates interest</li> <li>• Taps into what students know or think about the topic</li> <li>• Raises questions and encourages responses</li> </ul>	<ul style="list-style-type: none"> <li>• Attentive in listening</li> <li>• Ask questions</li> <li>• Demonstrates interest in the lesson</li> <li>• Responds to questions demonstrating their own entry point of understanding</li> </ul>
<b>Explore</b>		
<ul style="list-style-type: none"> <li>• Experience key concepts</li> <li>• Discover new skills</li> <li>• Probe, inquire, and question experiences</li> <li>• Examine their thinking</li> <li>• Establish relationships and understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Acts as a facilitator</li> <li>• Observes and listens to students as they interact</li> <li>• Asks good inquiry-oriented questions</li> <li>• Provides time for students to think and to reflect</li> <li>• Encourages cooperative learning</li> </ul>	<ul style="list-style-type: none"> <li>• Conducts activities, predicts, and forms hypotheses or makes generalizations</li> <li>• Becomes a good listener</li> <li>• Shares ideas and suspends judgment</li> <li>• Records observations and/or generalizations</li> <li>• Discusses tentative alternatives</li> </ul>
<b>Explain</b>		
<ul style="list-style-type: none"> <li>• Connect prior knowledge and background to new discoveries</li> <li>• Communicate new understandings</li> <li>• Connect informal language to formal language</li> </ul>	<ul style="list-style-type: none"> <li>• Encourages students to explain their observations and findings in their own words</li> <li>• Provides definitions, new words, and explanations</li> <li>• Listens and builds upon discussion from students</li> <li>• Asks for clarification and justification</li> <li>• Accepts all reasonable responses</li> </ul>	<ul style="list-style-type: none"> <li>• Explains, listens, defines, and questions</li> <li>• Uses previous observations and findings</li> <li>• Provides reasonable responses to questions</li> <li>• Interacts in a positive, supportive manner</li> </ul>
<b>Extend/Elaborate</b>		
<ul style="list-style-type: none"> <li>• Apply new learning to a new or similar situation</li> <li>• Extend and explain concept being explored</li> <li>• Communicate new understanding with formal language</li> </ul>	<ul style="list-style-type: none"> <li>• Uses previously learned information as a vehicle to enhance additional learning</li> <li>• Encourages students to apply or extend the new concepts and skills</li> <li>• Encourages students to use terms and definitions previously acquired</li> </ul>	<ul style="list-style-type: none"> <li>• Applies new terms and definitions</li> <li>• Uses previous information to probe, ask questions, and make reasonable judgments</li> <li>• Provides reasonable conclusions and solutions</li> <li>• Records observations, explanations, and solutions</li> </ul>
<b>Evaluate</b>		
<ul style="list-style-type: none"> <li>• Assess understanding (Self, peer and teacher evaluation)</li> <li>• Demonstrate understanding of new concept by observation or open-ended response</li> <li>• Apply within problem situation</li> <li>• Show evidence of accomplishment</li> </ul>	<ul style="list-style-type: none"> <li>• Observes student behaviors as they explore and apply new concepts and skills</li> <li>• Assesses students' knowledge and skills</li> <li>• Encourages students to assess their own learning</li> <li>• Asks open-ended questions</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates an understanding or knowledge of concepts and skills</li> <li>• Evaluates his/her own progress</li> <li>• Answers open-ended questions</li> <li>• Provides reasonable responses and explanations to events or phenomena</li> </ul>