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| NGSS Performance Expectation |
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| Science & Engineering Practices | Disciplinary Core Ideas | Cross Cutting Concepts |
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| Essential Questions (engaging question linked to Performance Expectation) |
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EVALUATE - how will you assess student mastery of performance expectations (learning goals)?

* for students to assess their understanding of the learning objectives
* for the teacher to assess student understanding of the learning objectives

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| Formative Assessment (check-ins to inform instruction) | Summative Assessment (to assess mastery of performance expectations) |
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| Academic Vocabulary | Scientific Vocabulary |
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| Instructional Activity Resources (Which activities will help students achieve Learning Targets?) |

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| **ENGAGE*** to convey the context of the unit by formulating an essential question
* to engage students in investigations that reveal their thinking to themselves and the teacher
* to record the initial ideas of students
* to engage student interest

EX: Socratic Seminar (Math Talk or Science Talk), Media (video, pictures), Anticipatory Set, Qualitative inquiry, Predications, Demo |
| **ENGAGE****Performance Expectation & Essential Question addressed:**What Teacher Does:What Students Do: |
| **EXPLORE*** to test ideas and develop knowledge using explorations, investigations, experiments
* to modify and record ideas as they change due to activities
* to develop new questions and testable hypotheses

EX: Inquiry, Group work/discussion, Project-Based-Learning, Online interactive module, Engineering/Design Project, Quantitative lab with data analysis & evidence |
| **EXPLORE****Performance Expectation & Essential Question addressed:**What Teacher Does:What Students Do: |
| **EXPLAIN*** to answer the Driving Question and Focus Questions through student explanations
* to provide students with relevant vocabulary, formal definitions and explanations of concepts

EX: Interactive or leveled notes, Reciprocal Reading, Leveled reading with graphic organizer, Clarify vocabulary, Socratic Seminar (Science Talk), Webquest, Small group instruction, Create a demonstration or model |
| **EXPLAIN****Performance Expectation & Essential Question addressed:**What Teacher Does:What Students Do: |
| **ELABORATE*** to extend students' conceptual understanding through application or practice in new settings

EX: Webquest, Independent study projects, Differentiated activities, Online interactive module, small-group activity/discussion, verbal explanation instead of written, quantitative lab with data analysis & evidence |
| **ELABORATE****Performance Expectation & Essential Question addressed:**What Teacher Does:What Students Do: |