<table>
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<th>Element</th>
<th>Description</th>
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| Phenomena Based       | • Students’ work is anchored in meaningful phenomena or problems that motivate building ideas over time.  
                        • Anchoring phenomena and problems are complex, relevant, and returned to as we figure out more.  
                        • Students investigate related phenomena to figure out pieces of the explanation.  
                        • Assessments ask students to make sense of specific and compelling phenomena using their understandings built during the unit. |
| Coherent for Students | • Students’ prior ideas and understandings are elicited, valued and built upon.  
                        • Students and teachers work together to figure out where to go next and what evidence is needed to answer their questions.  
                        • Students understand what they are doing and how it will help them answer questions about a larger phenomenon or solve a problem.  
                        • Students engage in science and engineering practices in meaningful ways in order to make progress on their questions. |
| Driven by Evidence    | • Students’ ideas and questions determine what evidence to collect.  
                        • Students seek and use evidence to figure something out as they build and revise their explanations, models and arguments.  
                        • Investigations provide evidence to build new science ideas instead of confirming pre-taught ideas.  
                        • Evidence can be used to problematize our current thinking and help us think about where to go next. |
| Collaborative         | • Students have opportunities to use, build upon, and critique other’s ideas.  
                        • Students use evidence to support ideas, ask for evidence from others, and suggest ways to get additional evidence.  
                        • Students have several opportunities to give and get feedback.  
                        • The culture of the classroom supports risk taking and changing our minds. |
| Equitable             | • Students have multiple opportunities to make sense individually and through small and whole group discussions.  
                        • The class community values the diversity of resources students bring to science class, including language, gestures, metaphors, and various modes of expression.  
                        • Norms are established and revisited to support equitable sensemaking.  
                        • Teachers integrate a variety of assessment activities to elicit, interpret, and provide feedback to build from students’ diverse ideas and experiences.  
                        • Students understand how and why what they are learning is relevant to their own lives and their communities. |