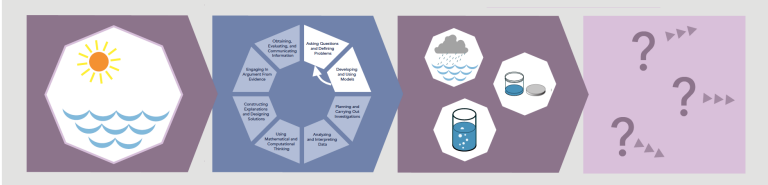

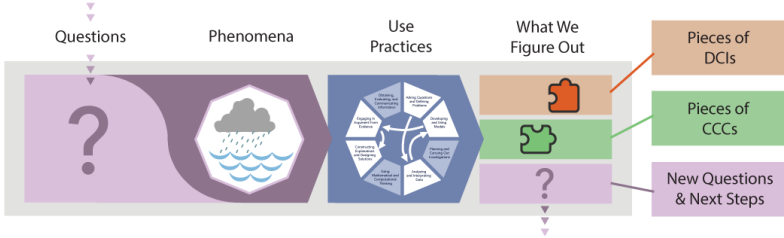
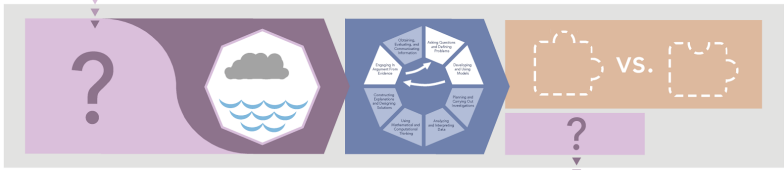


How Do We Bring 3-Dimensional Learning into Our Classrooms? 5 Questions/Classroom Routines

Question	Routine	Elements
How do we kick off investigations in a unit?	<i>Anchoring Phenomenon Routine</i>	<div>Explore Anchoring Phenomenon</div> <div>Attempt to Make Sense</div> <div>Identify Related Phenomena</div> <div>Develop Questions & Next Steps</div> 
How do we work with students to motivate the next step in an investigation?	<i>Navigation Routine</i>	<div>◀◀ Looking Back</div> <ul style="list-style-type: none"> • Where did we leave off? <div>Looking Forward ▶▶</div> <ul style="list-style-type: none"> • What are we trying to figure out? • How can we work on this today? <div>Lesson</div> <div>◀◀ Looking Back</div> <ul style="list-style-type: none"> • What have we agreed on? • Where are we not sure? <div>Looking Forward ▶▶</div> <ul style="list-style-type: none"> • Where should we go next? 
How do we help students use practices to figure out pieces of the science ideas?	<i>Investigation Routine</i>	<div>Questions</div> <div>Phenomena</div> <div>Use Practices</div> <div>What We Figure Out</div> <div>Pieces of DCIs</div> <div>Pieces of CCCs</div> <div>New Questions & Next Steps</div> 
How do we push students to go deeper and revise the science ideas we have built together so far?	<i>Problematizing Routine</i>	<div>Questions</div> <div>Phenomena</div> <div>Use Practices</div> <div>What We Figure Out</div> 
How do we help students put together pieces of the disciplinary core ideas and crosscutting concepts?	<i>Putting Pieces Together Routine</i>	<div>Questions</div> <div>Phenomena</div> <div>Use Practices</div> <div>What We Figure Out</div> 