

# Applying the Learning Cycle to Data Labs

Learning Cycle Phase	Dynamic Air-Sea Interactions
<b>Invitation</b> How will it get learners interested in learning about the topic and access their prior knowledge?	Show video of historic NE coastal storm of 2018. Students relate any first-hand experiences. Turn & Talk about atmospheric processes and ocean conditions that might have caused it.
<b>Exploration</b> How will learners have experiences that provide observations and discoveries to help them ask and answer questions, and make sense of the topic?	Pairs examine widget and summarize patterns. What are they wondering about that they might not be able to explain yet?
<b>Concept Invention</b> How will learners be encouraged to struggle with their understanding and negotiate their ideas with others?	Students participate in class discussion, explaining and supporting their ideas with evidence gathered from the widgets and prior knowledge about the concepts. Teacher adds explanation and helps to make connections as necessary.
<b>Application</b> How will learners authentically use what they've learned and apply it to a new situation or context?	Students use widget to investigate atmospheric pressure and make hypotheses based on data from widgets. They predict precipitation & check results.
<b>Reflection</b> How will learners think back on the process of learning to help reinforce their understandings & make them better learners in the future?	What concepts did you need to learn more about in order to figure out what air-sea interactions may have resulted in the Bomb Cyclone?