## Storyline Tool #2: Navigation Routine in Connected Investigations

### Select your context for using this tool:
- ⬜ Analyzing Existing Curriculum Materials
- ⬜ Planning to Teach With Existing Curriculum Materials
- ⬜ Adapting or Designing New Curriculum Materials

### How well are the lessons connected and motivated by ideas raised by students?

#### Analysis

<table>
<thead>
<tr>
<th>Strengths (include evidence)</th>
<th>Weaknesses (include evidence)</th>
</tr>
</thead>
</table>

#### Next steps for...
- ➤ **Planning**: What will you do when you teach this lesson?
- ➤ **Adapting**: How could you add or enhance these elements?

#### Element 1

**Looking back**

What did we just do?

1: Do you see an opportunity for the class to articulate how they got here, including:
- what did the class *just* figure out today?
- or what did the class figure out *last time*?

#### Element 2

**Looking forward**

What are our next steps?

2A: Do you see an opportunity for the class to articulate a question that the class identified they need to address?

2B: Did you see an opportunity for the class to articulate a direction that the class identified they need to pursue?
### Storyline Tool #3: Investigation Routine in Connected Investigations

**Select your context for using this tool:**
- Analyzing Existing Curriculum Materials
- Planning to Teach With Existing Curriculum Materials
- Adapting or Designing New Curriculum Materials

- What materials are you working with?

<table>
<thead>
<tr>
<th>How well does the lesson lead students to engaging in practices to address questions arising from phenomena?</th>
<th>Analysis</th>
<th>Next steps for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do students build important pieces of DCIs and/or CCCs?</td>
<td><strong>Strengths</strong> (include evidence)</td>
<td><strong>Weaknesses</strong> (include evidence)</td>
</tr>
</tbody>
</table>
| **Element 1**  
Questions & Phenomena  
*What question are students trying to answer or what problem are they trying to solve?* | **1A:** The investigation is framed around trying to answer a question about a phenomenon or a problem to solve.  
**1B:** Students investigate a phenomenon. | |  
**Planning:** What will you do when you teach this lesson?  
**Adapting:** How could you add or enhance these elements? |
| **Element 2**  
Use Practices  
*What are students doing?* | **2:** Students use science and engineering practices to make progress on figuring out the phenomenon. | | |
| **Element 3**  
What Students Figure Out  
*What pieces of the puzzle do students figure out?* | **3A:** Students figure out pieces of the puzzle that help make progress on the lesson question.  
**3B:** The pieces of the puzzle that students figure out are parts of DCIs and CCCs. | | |

These materials were developed with support from the Gordon and Betty Moore Foundation to Northwestern University and support from the NGSSX Project at Clark University, Tidemark Institute, and Northwestern University. Adapted from Five Tools and Processes for NGSS - Tool 4 AMNH 2016. This work is licensed under a Creative Commons Attribution 4.0 License. [http://creativecommons.org/licenses/by/4.0/](http://creativecommons.org/licenses/by/4.0/)
| 3C: Part of what students figure out is the next question(s) to pursue and next steps the class can take. |   |   |