# Strategies to Create a Coherent Science Content Storyline
# Analysis Guide F:
# Making Explicit Links between Science Ideas and Activities

**Part 1**

| | |
|---|---|
| Activity Description | The teacher tells students a story about mice whose environment changes. Then students predict which mice have a better chance of surviving based on trait variations in fur color, and they construct explanations for why they think the white, tan, or black mice will survive long enough to have babies. |
| Main Learning Goal and/or Focus Question | **Focus question:** How do variations in the color of a mouse's fur and its environment help some mice survive long enough to have babies? |
| Supporting Science Ideas Intended to Be Developed through the Activity Setup, the Activity Itself, and the Activity Follow-Up<br>(*Number Each Idea*) | 1. **Setup for activity:** Trait variations in living things of the same kind can affect which individual organisms survive and which don't.<br>2. **Activity:** When the environment of a living thing changes, some trait variations, such as fur color in mice, give some individual organisms a better chance of surviving.<br>3. **Follow-up to activity:** Living things that survive will be more likely to produce young that have the same trait variations as their parents, such as fur color. |

**Part 2**

| Criteria for Explicit Links between Science Ideas and Activity | Analysis of Explicit Links between Science Ideas and Activity | | |
|---|---|---|---|
| **1. Setup for the Activity** | **Yes** | **No** | **Your Analysis of Links in the Setup** |
| a. Are students prompted to think or write about the focus question or goal statement?<br><br>b. Are explicit links made between science ideas and the activity?<br><br>c. Does the setup help students understand why they're doing the activity (e.g., what ideas they will learn from it)? | | | |
| **2. During the Activity** | **Yes** | **No** | **Your Analysis of Links during the Activity** |
| a. Do students think about science ideas during the activity?<br>(*Consider: Do students use ideas, or are they focused on procedures?*)<br>b. Do students know they're expected to connect science ideas with what they're doing in the activity?<br>(*Consider: Does the activity or the teacher help students connect science ideas to what they're doing?*) | | | |

| Criteria for Explicit Links between Science Ideas and Activity | Analysis of Explicit Links between Science Ideas and Activity | | |
|---|---|---|---|
| **3. Follow-up to the Activity** | **Yes** | **No** | **Your Analysis of Links in the Follow-up** |
| a. Are science ideas explicitly linked to the activity in the follow-up? If so, indicate what the teacher does or what the students do to link ideas and the activity.<br>b. Are *students* involved in making links between the science ideas and the activity? | | | |

**Part 3:** Are the linked science ideas well matched to the main learning goal and/or focus question of the lesson? Explain your reasoning.