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

Part 1

Activity Description	Students create an energy-flow diagram showing where energy comes from, where it goes, and how it changes in a simple system.
Main Learning Goal and/or Focus Question	**Main learning goal:** Energy is never created or destroyed, but it can undergo many changes.
Supporting Science Ideas Intended to Be Developed through the Activity Setup, the Activity Itself, and the Activity Follow-Up (*Number Each Idea*)	1. Energy moves from place to place and from object to object, and we can detect it in different ways. 2. As energy moves and changes, it isn't destroyed or lost. 3. Energy may be detected differently, but new energy isn't created. 4. An energy-flow diagram can track the energy transfers and transformations that occur in interactions within a system.

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? b. Are explicit links made between science ideas and the activity? 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? (*Consider: Do students use ideas, or are they focused on procedures?*) b. Do students know they're expected to connect science ideas with what they're doing in the activity? (*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. 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.