Looking Back: STeLLA Strategies Synthesis (Answer Key)

Keep in mind that these are only *suggested* answers. Other responses may be appropriate based on the reasoning that is given.

Based on your experiences so far, how would you answer these synthesis questions:

- Which STeLLA strategies do you think should be used in *every* science lesson?
- Which STeLLA strategies do you think are appropriately used in *some* science lessons, *but not in all lessons*?

Student Thinking Lens Strategy	Every Lesson	Not in All Lessons	Science Content Storyline Strategy	Every Lesson	Not in All Lessons
1. Ask questions to elicit student ideas and predictions.		√	A. Identify one main learning goal.	√	
2. Ask questions to probe student ideas and predictions.	√		B. Set the purpose with a focus question or goal statement.	√	
3. Ask questions to challenge student thinking.		√	C. Select activities that are matched to the learning goal.	√	
4. Engage students in analyzing and interpreting data and observations.		√	D. Select content representations and models matched to the learning goal and engage students in their use.		√
5. Engage students in constructing explanations and arguments.		√	E. Sequence key science ideas and activities appropriately.	√	
6. Engage students in using and applying new science ideas in a variety of ways and contexts.		√	F. Make explicit links between science ideas and activities.	√	
7. Engage students in making connections by synthesizing and summarizing key science ideas.	√		G. Link science ideas to other science ideas.		√
8. Engage students in communicating in scientific ways.	√		H. Highlight key science ideas and focus question throughout.	√	
			I. Summarize key science ideas.	√	

Looking Forward: Using STeLLA Strategies in Lesson Planning (Answer Key)

Imagine you're going to teach science lessons in a content area that wasn't addressed in the RESPeCT PD program. As you plan these new science lessons using what you've learned about the STeLLA strategies, keep these questions in mind:

- Which STeLLA strategies must be clearly and specifically identified ahead of time?
- Which STeLLA strategies can be anticipated ahead of time (e.g., anticipating possible ways to use the strategy)?
- Which STeLLA strategies develop in response to what is going on during the lesson?

Student Thinking Lens Strategy	Must Be Identified in Advance	Can Be Anticipated in Advance	Develops in Response during Lesson	Science Content Storyline Strategy	Must Be Identified in Advance	Can Be Anticipated in Advance	Develops in Response during Lesson
1. Ask questions to elicit student ideas and predictions.	√		√	A. Identify one main learning goal.	√		
2. Ask questions to probe student ideas and predictions.		√	√	B. Set the purpose with a focus question or goal statement.	√		
3. Ask questions to challenge student thinking.	√	√	√	C. Select activities that are matched to the learning goal.	√		
4. Engage students in analyzing and interpreting data and observations.	√		√	D. Select content representations and models matched to learning goal and engage students in their use.	√		√
5. Engage students in constructing explanations and arguments	√		√	E. Sequence key science ideas and activities appropriately.	√		
6. Engage students in using and applying new science ideas in a variety of ways and contexts.	√		√	F. Make explicit links between science ideas and activities.	√		√
7. Engage students in making connections by synthesizing and summarizing key science ideas.	√		√	G. Link science ideas to other science ideas.	√		√
8. Engage students in communicating in scientific ways.		√	√	H. Highlight key science ideas and focus question throughout.	√		√
				I. Summarize key science ideas.	√		