WEEK 7 Lesson 1

Science and Engineering

Changes in Seasons

S & E Big Idea	Each season has a typical weather pattern that can be observed, compared, and predicted.		
S & E Guiding Question	How do the seasons change throughout the year?		
Content Objective	I can describe how seasons are different. (1-ESS1-2)		
Language Objective	I can share ideas with my partner about how the seasons are different. (SL.1.1)		
	I can record observations about how the seasons are different, using science words from conversations and the text we read. (L.6.1)		
Vocabulary	season: one of four parts of the year, marked by changes in weather patterns and daylight hours		
Materials and Preparation	 Full STEAM Ahead!: The Four Seasons, by Crystal Sikkens (can be found on epic!, or https://www.getepic.com/book/80308637/full-steam-ahead-the-four-seasons poster paper, one for each partnership Divide each paper into four equal sections, with sections labeled Summer, Fall, Winter, Spring crayons and colored pencils Identify partnerships for children to create their posters. 		
Opening 1 minutes	In today's Science and Engineering lesson, we will explore how the seasons change over the course of the year. First, we will read a book that describes how and why the seasons change, and then you'll work with a partner to create a poster to share your learning. We will focus on answering the question, how do the seasons change throughout the year?		

Text We will read the book, Full STEAM Ahead!: The Four Seasons by 10 minutes Crystal Sikkens. As we read, we will learn about how the seasons change over the course of the year. When we are finished reading, you will work with a partner to create posters to share what you've learned about the differences between the seasons. Read the book. On the first page, pause to link the word 'cycles' to the word, 'patterns'. The author uses the word cycles, but we have been talking about the same thing, patterns. Remember, a pattern is something that repeats itself. After finishing page 8, pause to say: Remember from our lessons a while ago that the Earth moves on a path around the Sun. That's part of the reason for seasons. In our next lesson, we will be exploring how the amount of sunlight changes during the seasons. Today, we'll just be thinking about other ways the seasons are different from one another. Pause minimally throughout the rest of the text to define vocabulary as necessary. **Practice** Now it's your turn to record what you know about the seasons. It can 15 minutes be information you learned from the text we read, or from your own observations and experiences. I'm going to break you into partners and provide you with a poster paper that has four sections, one for each season. Your job is to work together to write and draw to show what you know about each season. You could include things like: How the weather changes What activities you do and what you wear How plants and animals are different What you know about daylight in each season Closing Invite children back to the meeting area to sit in a circle with their posters. 3 minutes Now that you've had a chance to record some of your learning about seasons, let's share a few of our ideas. As others are sharing, remember that scientists learn from one another! We will have a bit of time in our next lesson to add more to our posters, so be listening closely to ideas that others are sharing. Invite a few children to share an idea they came up with.

Take a moment to think about ideas you heard that you and your partner might want to add to your poster in our next lesson.

	We learned a lot about seasons today, both from the book we read and from our classmates. In our next lesson, you will have a chance to add more to your poster, but we will also explore more about the amount of daylight in each season. As always, you may record your ideas and learning in your science journal, as well!
Standards	1-ESS1-2 Make observations at different times of the year to relate the amount of daylight to the time of the year. SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small or larger groups. L.6.1 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g. because)
Ongoing assessment	Review science journals and posters to monitor student understanding of the changes across seasons. Take note during whole-group conversations about students' understanding of changes across seasons. Use posters to assess use of domain-specific vocabulary learned through the read aloud and/or conversations with partners and the whole group.

Notes	