Weather and Climate: Lesson 18

Essential Question: How can we prevent a storm from becoming a disaster?

Focus Question: How can we plan for severe weather?

Phenomenon Question: How can people reduce the impact of weather hazards?

Objective: Investigate how people protect themselves from weather hazards.	**Materials:** Pencil	**Projected Slides:** 191–200

Share the following items with families in advance of the lesson.

- Links: Lesson 18 Daily Video, Science Journal Lesson 18
- Materials list
- Assignment: After watching the video, students complete the severe weather chart and summarize what they learned about weather hazards in the lesson.

Remote Learning Recommendations

Type		Pacing	Activity	Notes
Hybrid (in-class synchronous and remote asynchronous)	Asynchronous (in Sync)	10–15 minutes	Daily Video	Video description: Students consider the cause and effect relationship between weather hazards and their effects as they investigate solutions to reduce the impact of those hazards. Students then develop explanations for why weather hazard solutions are important to people and the communities in which they live.
		10 minutes	Assignment	The video asks students to complete the severe weather chart and summarize what they learned about weather hazards in the lesson.
		15 minutes	Virtual Class Meeting (Optional): Science Discourse	Ideally this meeting occurs after students watch the video and complete the assignment: • *Discuss Weather Hazard Solutions Remote Alternative* Display the class severe weather chart from Lesson 16, and explain that the class will update the chart by adding the solutions they observed for each type of severe weather. Facilitate a discussion about the Science Journal task. Provide students with opportunities to share their thinking with one another. Highlight any student responses on the chart that correctly identify how a solution helps reduce the impact of the weather hazards. As students discuss each solution, add a bullet to the class severe weather chart that summarizes the solution. If students identify reasonable solutions not shown in the photographs, add those to the class severe weather chart as well. Then repeat this process for each of the other types of severe weather. Send updated chart to all students. Facilitate a discussion about why people design weather hazard solutions if the solution cannot stop severe weather from happening.

				• *Update Anchor Chart Remote Alternative* Display the anchor chart and remind students of the Phenomenon Question **How can people reduce the impact of weather hazards?** Ask students to use their new knowledge to answer this question, and summarize student responses to add a statement to the anchor chart. Send updated chart to all students.
	Synchronous	5 minutes	Launch	Refer to Teacher Edition to conduct lesson Launch (Projected slides 191–193). Give all students a chance to participate either in-person or virtually.
	Synchronous	35 minutes	Learn	Refer to Teacher Edition to conduct lesson Learn (Projected slides 194–196). • Investigate Weather Hazard Solutions • Discuss Weather Hazard Solutions Update the class severe weather chart to include student ideas. Send chart to all students. Give all students a chance to participate either in-person or virtually.
	Synchronous	5 minutes	Land	Refer to Teacher Edition to conduct lesson Land (Projected slides 197–200). • Update class anchor chart to include student ideas. Send chart to all students. • Assign Optional Homework. Give all students a chance to participate either in-person or virtually.
Additional Instruction			Extension (Optional)	If students completed the Optional Homework, provide them with opportunities to share their findings of weather hazard solutions they identified in their community.

Asynchronous	Synchronous	Hybrid
Remote students using in Sync with optional virtual class meeting	Some students in-class and some remote but all participating live	In-class students are synchronous and remote students asynchronous