

## Lesson Guide for Educators: Lesson Three (2-3)

Lesson Question: What important ideas from fire science can we use to help us build a safe campfire?

Lesson Challenge: Create a picture that shows at least three actions that can help build a safe campfire.

In the detailed lesson plan, you'll find three parts: **Start the Thinking, Grow the Thinking**, and **Reflect on the Thinking**. While these parts can be used in order, this lesson is designed to be flexible—use the activities in order as a complete lesson or pick and choose individual activities to fit your needs.

Start the Thinking: To begin students' thinking about campfire safety, consider using at least one of the following activities.

Possible learning activities	Time	Steps
Show Image 1 from Campfire Images or provide a copy to student groups. Provide each group of students with Activity Sheet A and ask groups to rate the safety of the campfire. Invite groups to share their ratings and thinking with the class, encouraging them to suggest actions for a building a safer fire. Note their ideas for later in this lesson.	15 min	1-3
Provide each student with Activity Sheet B and introduce the lesson question and challenge. Ask students to use words or pictures to describe the steps and actions needed to build a safe campfire, assuring them they can change and add to their ideas throughout this lesson.	10 min	4

Grow the Thinking: To help nurture and deepen students' thinking about campfire safety, use at least one of these activities.

Possible learning activities	Time	Steps
Invite student to suggest how fires start, what burns, and how they spread. Note students' ideas for later in the lesson.	10 min	1
Display or draw the Fire Triangle and explain that fires need heat, fuel, and oxygen to burn. Have students sort their responses into the three components of the fire triangle. Discuss what happens to fire when various sides of the fire triangle are removed or eliminated. Provide each group with a copy of Activity Sheet C and ask groups to rate action using the criteria.	15 min	2,3,5-7
Ask students to revisit Campfire Image 1 and to identify details from the image that would belong with each side of the triangle. Discuss what happens to fire when various sides of the fire triangle are removed or eliminated. As students share their thinking, co-develop or present the criteria for safe and unsafe campfire actions.	10 min	8
Display or provide groups with Campfire Image Images 2 and 3, and another copy of Activity Sheet A. Ask groups to rate the safety of each campfire, using the criteria to identify safe and unsafe examples from each image and suggest actions they could take to make the campfire safer. Invite students to revisit Activity Sheet A and refine their ideas for actions that can help build a safe campfire.	10 min	9-11

Reflect on the Thinking: To guide students' reflection on campfire safety, consider using at least one of the following activities.

Possible learning activities	Time	Steps
Invite students to suggest what important ideas from fire science can be used to help us build a safe campfire. Encourage students to use their new learning to complete their drawings and descriptions of at least three actions that can help build a safe fire.	5 min	1-2

## Key terms and vocabulary

Criteria for safe actions when building a campfire

## Safe actions when building a campfire:

- $\bullet$  keeping away anything that can catch on fire and burn (fuel).
- reducing or preventing air from getting to the fire (oxygen).
- cooling down a fire to put it out (heat).