

▲ SAMPLE SESSION PLAN

Science: Bridges

We are building a bridge SCI-02	
Episode	 7 - Bridge of Sticks! 9 - Rocks in the Gully! 16 - How Many Pebbles Can a Bridge Hold? 19 - First Annual Marathon of Cardboard City! 21 - The Best Mango Juice in the Park! 24 - Don't Step on the Sand Dragon!
Learning area	Science
Learning focus	Bridges
Learning focus objectives	 The children will be able to name and describe a bridge. Children will explain how a bridge is used. Children will be able to create their own bridge and identify bridges in the environment.
Required materials	Recycled or low-cost materials for children to make bridges (examples include sticks from trees, popsicle sticks, straws, cloth or a large sheet, cardboard, wire, string, etc.), and an object to "cross over" the bridge (a toy car, ball, etc.).
Extension activity (if time)	If the session finishes quickly and you have time remaining, or if some children need an extra activity to extend their learning, you can select an activity from the bank of activities in the "Facilitator's Guide to Session Plans". These activities can be used as optional and/or additional activities. For example, if a child or group of children finish the prior activities ahead of time, or if you feel one of the activities is not working well, substitute it with the extension activities.

STEP 1: Before watching the video

Time: 5 minutes

Step guidance

- 1. Setup the video.
- 2. Check the children's prior knowledge about "bridges".
- 3. Describe the learning objectives for the session.

Script

"Children, today our Watch, Play, Learn video is about bridges. Who here knows what a bridge is?

[Allow children to offer different responses. Repeat the responses aloud for their peers to hear and correct any that may be incorrect.]

"Good job. A bridge connects one side to another side. It is used to help cross over something."

"Has anyone here ever crossed a bridge? Let's see."

[Allow children to offer different responses. If they can name a bridge, ask a follow-up question: "What do they think the purpose of that bridge was?" - If no one raises their hand, think of a bridge near your community that you can use as an example. Explain how you or others crossed the bridge and that the purpose was to move from one location to another.] "

"Excellent. So we know that bridges are all around us. Now let's learn more with the video."



- REMEMBER

There are 3 key messages for this session:

- 1. Bridges connect one side to the other and are used to cross over something.
- 2. Bridges need to be the right size to be useful.
- 3. Different things (materials) hold heavy things (weight) better than others.

STEP 2: During the video

Time: 5 minutes

Activity

You can select a short activity from the bank of activities in the "Facilitator's Guide to Session Plans" to use during the video if needed. This is optional.

If it is the first time that you are showing the video, let children watch the entire video without interruption. If the children have watched the video before, pause the video and do an activity to check children's comprehension.

STEP 3: After the video

Time: 15 minutes

Step guidance

- 1. Have children relate what they saw in the video about bridges to a science experiment.
- 2. Have children practice making bridges with different materials and compare and contrast which materials can hold heavy things better than others.

Script

"That was an interesting video. Let's talk about it."

[Ask the children to explain what the video they watched was about. Ask them to explain what a bridge is. Summarize what the children said and emphasize that a bridge is a construction used for moving from one side of something to another.1

"Great. So, remember, a bridge connects one side to another side. It is used to help cross over something.

Now, let's try making our own bridges to help things cross over."

[Model making bridges with different materials and having different objects cross over them.] For example:

- Invite 2 children to the front of the learning space. Ask each one to hold the end of a sheet. Roll a ball from one side of the sheet to another. You can do this multiple times with sheets that are wide and sheets that are thin. This will help you compare if the bridge (sheet) is wide enough for different objects to cross over. Explain aloud to the children.
- Set up two chairs or tables, and lay a big piece of carton or various sticks/ pieces of wood across from the two pieces of furniture. Ask a child to come make an object cross over it, for example, by moving a toy car, rolling a ball, or making a doll walk over it. Explain aloud to the children.

Script

While modeling an example say:

"Let's think about the size of this bridge. Do you think it is wide enough for a ____ to cross over? Do you think it is strong enough to hold a ____?"

[Repeat the questions various times, using examples of different size objects, people, or animals.]

[If time allows, let children try to make bridges by themselves or in small groups. Divide the children into teams. Give each team one of the small things (ball, toy car, doll, pencil) and materials to make the bridge (pencils, popsicle sticks, string, cloths, sheets, etc.). When the groups finish, allow each group to present their bridge to the class.]

"Well done today children. We learned about bridges. Bridges help us cross over from one side to another. Bridges are different sizes, and can be made of different materials. Some materials can hold heavy things, better than others. Bridges need to be the right size and have the right material to be useful."