



Name of the Activity: The Effect of Bridge Design on Weight Bearing Capacity

	Outcomes	Teaching and Learning activities	Assessment
	Having taken this activity, the participants will be able to:	The participants will be taught to achieve this specific outcome through the following learning activities:	The participants will be assessed on their achievement of this specific outcome through the following assessment tasks:
Blended Learning Format - Face-to-face	Recognize different types of bridges: Beam, Arch, Suspension, and Truss.	Presentation with a classroom discussion introducing different types of bridges: Beam, Arch, Suspension, and Truss.	Participation in group discussions.
	Explain the factors that affect the strength of a bridge design (e.g., materials, shape, design, and load distribution).	Presentation with a classroom discussion.	Participation in group discussions; individual reflections on a bridge strength.
	Plan the bridge's design.	Watching a video about how to construct a bridge.	Participation in group discussions.
	Collaborate effectively in teams to complete the group project.	Group activities: brainstorming, assigning roles, and assembling the bridge.	Observation of teamwork during group activities; peer feedback on collaboration.
	Test their designs and analyze why certain designs performed better than others.	Observing if the bridge collapses or not on different weights.	Written or verbal reflection shared in class.
Interactive Learning Tasks, Gamification/ Moodle / Online	What it is a bridge?	H5P-task – true-false.	Assessment via interactive tasks.
	What are the different types of bridges?	H5P-task – cross words.	Assessment via interactive tasks.
	On what a bridge design depends?	H5P-task – multiple choice.	Assessment via interactive tasks.

