

4. Where did your bridge fail? What could you have done to improve the strength of your bridge?

5. Look at the following scenarios and determine which type of bridge should be used at each obstacle.

a. A bridge is required to connect two sections of a bike path that are separated by a stream. The bridge will need to span a distance of 50 meters and will be used primarily by bicyclists, joggers and rollerbladers.

b. A bridge is required that can span 150 meters in order for railroad tracks to cross a deep river. It will connect two rocky land areas separated by the river.

c. A bridge is required to span a distance of 1,525 meters across a bay. The bridge must be able to accommodate heavy motor vehicle traffic into and out of the city and water traffic must be able to pass under it as the city is a major port/harbor.

Individual Design Worksheet

Bridge Specifications:

	Bridge	Optional Underhang
Length	25–30 cm	Under 20 cm
Width	5–7.5 cm	5–7.5 cm
Height	Under 10 cm	2 cm

VIEW: _____

A large grid of graph paper, consisting of 20 columns and 30 rows of small squares, intended for drawing a bridge design.