

Name(s) \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

# Activity Guide - Spaghetti Bridge



## Goal

Build a bridge that holds the most possible books, using spaghetti. You will build two bridges and will try to improve your design between the first and the second.

## Rules

- You may only use the spaghetti and the glue that your teacher gives you.
- The bridge must cross a one foot (or 30 cm) gap.
- You may not touch or adjust your bridge once the books are on it.
- You must add books one at a time

## Develop a Plan

- What kind of bridge does your group plan to make? Write a description or draw a picture below.

- What are the strengths of this design? What possible weaknesses might this design have?

## Test Your Bridge

- How many books did your bridge hold?
- Why did your bridge eventually break? What needs to be improved?

## Evaluate and Improve

- What are the most common kinds of problems you see among the bridges tested?
- What ideas seem to be working well?

## Develop a Plan

- What kind of bridge does your group plan to make? Write a description or draw a picture below.
- What are the strengths of this design? What possible weaknesses might this design have?

## Test Your Bridge

- How many books did your group's new design hold?
- Why did your bridge eventually break? What needs to be improved?

## Reflect

- How did working in a team make this activity easier?
- How did it make the activity more challenging?
- What helped your group overcome these challenges?