Lab # ___ Name _____ # ____ Name _____ # ____

Name _____ # ____ Name _____ # ____

Bridging the Gap

Problem: Design a fixed bridge that will span a gap specified by your teacher.

Materials: 2-150 ml beakers, one petri dish with lid, 12 glass microscope slides, water, dropping pipette

Parameters:

( )1. You may use only the materials provided in your tray

( )2. Human hands can touch the system during construction, but may not support the span nor touch the bridge during final measurement.

( )3. The facing edges of the two 150 ml beakers may be no closer that 20 cm measured rim to rim.

( )4. There may be no support materials beneath the span in contact with the table top.

( )5. A successful bridge is one that crosses a span of 20 cm without collapsing during the final measurement by your instructor.

Procedure:

( )1. Brainstorm as many ideas as possible.

( )2. Choose your best idea and illustrate (draw below) what the final bridge looked like. Use a pencil, and LABEL YOUR DRAWING.

Awarding of points: Your instructor will award points for your bridge ONLY ONCE during this laboratory exercise.

_____ ( )1. The required diagram must be completed to the satisfaction of your instructor before your bridge is measured. 10 points for any bridge successfully spanning the 20 cm gap.

_____ ( )2. 1 additional point for each complete centimeter of span measured beyond the required 20 cm.

(The span of our bridge is _____ cm).

_____ **Total Points**