Name _____ Date _____ Period _____

LAB: Constructing a Paper Tower

PRACTICAL PHYSICS

Background: This activity is designed to show students that time, planning, modeling, designs, teamwork, and application are important in learning about "real world" construction projects. Students work in groups to build a free standing structure, built entirely from a single sheet of paper (8.5" x 11"), 50 cm of cellophane tape, and scissors. Students should work in small-cooperative teams to complete the task. Students should discuss their ideas, record their thoughts in the data sheet, and construct their structures.

OBJECTIVES:

Demonstrate basic construction skills by building a free standing structure, using predetermined materials

Identify problems, successes, revisions, and purpose of lesson by group discussion and answering questions on attached worksheet.

MATERIALS:

- 1 sheet of paper (8.5" x 11")
- 50 cm of cellophane tape
- scissors

PROCEDURE:

- Form groups of 4-6 students each.
- Each group will need a cleared floor area, and assigned materials.
- Take 5 or10 minutes at least to "brainstorm" on how to begin and record you ideas and theories in the space provided (only one completed worksheet is required per group)
- Draw your design in the space provided to the right before you begin.

QUESTIONS:

1. To what extent was your team successful in building the structure? What was the height of your structure?

2. What was the most difficult part of building the free standing structure?

3. What problems, if any, did you have to solve?

4. What changes, if any did you make after beginning construction?

5. If you could do it again, what changes, if any, would you make?