**Materials**

- Typing Paper
- Paper Clips
- Tape
- Measuring Performance Score Sheet
- Books (for variation)

**Preparation**

- Each team should receive a large quantity of paper, tape, and paper clips.
- Print one Measuring Performance Score Sheet for each team.
- Provide each team with books for variation

**Eating & Settling-In (15 min)**

**Focus (5 min)**

Students are to construct a tower made of paper, paper clips, and tape.

**Mini-Lesson/Modeling (20 min)**

- Build a small tower out of the materials while explaining the rules of the project:
  - You cannot tape the tower to anything else (like a wall or a chair or the ground).
  - The tower should be at least 18” in height.
  - You cannot use materials other than: Typing Paper and Paper Clips/Tape.
  - If doing variation, demonstrate how to build a tower capable of supporting weight.
Small Group/Independent Work Time (40 min)
- Design Phase (10 Minutes) - For ten minutes, groups will verbally plan the construction of their towers. They may not make any drawings or manipulate materials in any way during this planning period.
- Production Phase (30 Minutes) - Start building the tower.
- Each team must choose a "volunteer" to judge all the towers after they have all been constructed.

Variation
- Students build a tower which is able to support the weight of multiple books.
- Teams collaborate on a design and build a tower using paper and tape as building supplies.
- Towers are tested by applying the weight of one book at a time until the tower is unable to support the weight.
- The tower supporting the most books "wins."

Presentations (15 min)
Students provide a brief presentation analyzing their approach to the paper tower design. Answer these questions:
- Describe the overall theme of your tower design.
- Describe how you coordinated the planning/building effort.

Reflection/Closing (10 min)
Discuss what worked for the "winning" towers (tallest, aesthetically pleasing, stable, held the most weight). What techniques were successful?

Clean-Up (10 min)
Each team will provide one member, at the end of class, to go around and judge all of the towers (including their own) on a 0 to 100 scale on each dimension (beauty, height, stability). Below is a scoring sheet you can use. Make sure to put your name and team down. A mentor will also grade the towers.

Your Name: ___________________________ Your Team: ___________________________