The Brown Bag STEM Challenge- Paper Helicopters

What better way to take a brain break than by building paper helicopters??! ☺ This challenge is a great INDIVIDUAL or TEAM challenge.

Materials (per individual or team):

* Paper- all the same size and type (computer paper-any color 81/2 X11)
* Pattern for helicopter (see additional document)
* Paperclips (small size)
* Stopwatch
* Scissors
* Ruler
* Measuring tape

Your challenge is to use the materials above to build a paper helicopter that can stay aloft the longest (measured in seconds).

**Rules:**

1. The type and size of paper and paper clip must be held constant (computer paper, small paper clips)
2. Weight is added to your paper helicopter be increasing the number of paper clips.
3. The amount of time the paper helicopter stays aloft is measured in seconds.
4. The height the paper helicopter is dropped from must be held constant for each drop (drop height =6 feet)
5. Use the following formula to calculate the time your paper helicopter stays aloft.

6T + 4P= Total Points \* For example, if my helicopter stays aloft for 10 seconds (T) carrying 2 paperclips (P), I would earn 68 points (6x10) + (4x2) =68 points.

1. E-mail your total point value to your teacher. If you take a picture or video clip of you performing the challenge, we would love to see it!

Remember, the winner of the challenge is determined by the total point value!

**\*\*\*\*Created by Kimberly Lennox and Jayne Reck @ Porter Traditional School**