**The Great Friction Race**

**Objective:** Move a marble from the top of the cardboard to the bottom the *slowest*

Rules -read the fine print! ☺

1. The time will be started when you release the marble at the top and it will be stopped when the marble reaches the bottom of the cardboard (42cm).
2. The marble must be moving at all times once it is dropped! If the marble stops or gets stuck, your group will be disqualified.
3. The only two forces that can affect the marble’s motion are gravity and friction.
4. You cannot use more than the provided supplies.
5. Any of the supplies can be altered EXCEPT the cardboard base MUST remain at its original dimensions.
6. The marble cannot come in contact with any glue (only the materials listed to the left can affect the marbles motion).
7. Nothing can be attached to the marble.
8. You cannot touch any of the materials once your marble is dropped.
9. Your cardboard base must be free standing with no props outside of the given supplies.
10. Given 1 double period to construct.
11. Your design must be approved by Mrs. Tomb to be considered for the contest.
12. Mrs. Tomb can make up any new rules at any time :)

Materials

* Cardboard Base (42 x 32 cm)
* 2 Smaller Cardboard Pieces
* 1 File Folder
* 1 Pipe Cleaner
* 10 pieces of spaghetti
* 1 sheet of newspaper
* 1 Paper Towel Square
* 1 meter of masking tape
* *You will also get a glue gun to help*
* *assemble your design*



