Rocket test sheet

Mission Control's stamp

Guess first. Then test. Push one way. Zoom the other!

Rocket engineer: _____ Mission Control: _____

1 Can it reach the Moon?

Rocket	My guess	Where it stopped	Moon?
1  **No string**			yes / no
2  **Droopy string**			yes / no
3  **Tight string**			yes / no

Use a full balloon for all three rockets, so the test is fair. Only the string changes.

2 Big push or small push?

Rocket	My guess	Steps from start	Farthest?
3 Big push full balloon			
4 Small push half full			
5 My own idea			

Same tight string, same kind of balloon. Change only the air.

Line up your sticky notes on the floor. Which rocket went the farthest?

Draw each rocket on the string where it stopped, and write its number.



Mission Control's cheat sheet

Your job: be Mission Control

1. You blow up the balloons, or use a pump. Balloons never go in children's mouths.
2. Point the balloon's open end away from faces. Clear the path before every launch.
3. Pick up any broken balloon pieces at once.
4. No running near the zip line. Take it down when you're done.

Grown-ups: rockets can surprise you. Here is what to do.

If this happens	Do this
The rocket won't move	Check the balloon isn't tied, and that the straw slides easily along the string.
It stops halfway	Pull the string tighter and make it level. A smoother string, like fishing line, helps.
It spins or rubs on the string	Tape the balloon straight along the straw, open end facing the start.
The tape won't hold the balloon	Stick the tape to the straw first, sticky side up. Then press the balloon on.
The balloon is hard to blow up	Stretch it a few times first, or use a balloon pump.
A balloon breaks	Pick up every piece at once and throw them away. Pieces are a choking risk.
Your engineer wants to try something new	Say yes! Change one thing at a time and write it down as rocket 5.

When you're done, take the zip line down so nobody walks into it.

Balloons are a choking risk for children under 8. Grown-ups blow up the balloons and pick up any broken pieces at once.