



QUICK PROJECT BALLOON ROCKETS



AUTHORIZED AMA
STE(A)M PROGRAM



AN OFFICIAL COMPETITION OF THE ACADEMY OF
MODEL AERONAUTICS EDUCATION DEPARTMENT

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SUPPLIES

Yarn

Plastic Straws

Balloons

Balloon Pump(s)

Measuring Tape

Tape

STANDARDS

4.PS.2 Investigate the relationship of the speed of an object to the energy of that object.

4.DA.1 Formulate questions that can be addressed with data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables (including frequency tables), line plots, and bar graphs.

ACTIVITY

This activity works best in a large room or a hallway. You will need 2 chairs. Measure 25 feet with the measuring tape and arrange one of the chairs on one end of the hall or room and one on the other side. Tie or tape only one end of the string to a chair and lay the other end on the floor.

WATCH A VIDEO

Learn more and see the process in action at www.sciencefriday.com/educational-resources/balloon-rockets/

CHALLENGE

Furthest distance? Loudest pop? Fastest set-up to launch? Get creative!

Order of operations:

1: Blow up the balloon.

2: Hold the balloon and keep the air from escaping.

3: **(may require assistance)* Tape the balloon to the straw.

4: Carefully pull string through the straw.

5: Tape down the loose end of the string to the chair.

Once the balloon has been placed on the string, count down and the children will release and see how far the balloons will go. The air being released creates thrust, which propels the balloon forward on the string, like a rocket engine would!

