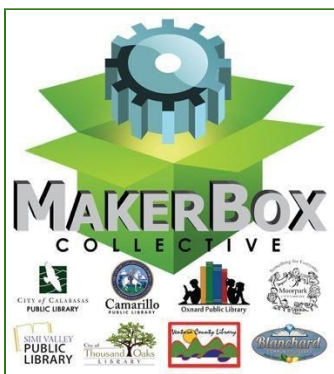


Balloon Powered Rocket

Hands on Science at Home
Issue 2



MATERIALS

Balloon, Yarn or String, Tape, Straw, Scissors,
Two Chairs, Rocket cutout (optional)

STEPS

1. Cut the straw into about a two inch long piece.
2. Cut a length of yarn about six feet or more long.
3. Tie one end of the string to one chair and slide the piece of straw onto the yarn.
4. Now tie the other end of the yarn to the other chair.
5. Blow up the balloon. Pinch the end of the balloon closed but do not tie it off. Attach the rocket cutout to the balloon if you want.
6. Tape the balloon to the straw.
7. Pull the straw and balloon to one end of the yarn.
8. Release the balloon and watch your balloon rocket take off.

TAKEAWAY

Newton's Third Law of Motion: for every action there is an equal and opposite reaction. When we release the balloon, the pressurized air in the balloon pushes against the air around the balloon sending it in the opposite direction down the yarn.