

# Build a

# mini-rocket

2

Blast off with a model of NASA's Space Launch System, the rocket sending humans towards the Moon.

## What you need

- Rocket templates (find them at [tinyurl.com/SN-minirocket](http://tinyurl.com/SN-minirocket))
- Scissors
- Pen
- Sticky tape
- Paper straw

## How does it work?

This experiment is inspired by the work of Katherine Johnson. As a young girl she loved to count, and when she went to school Johnson excelled at maths. She was part of a small group of black women who performed complex calculations for the US space agency. In 1961, she worked out the flight path of the rocket that carried the first American into space. She later figured out how get a spacecraft in and out of the Moon's orbit. Her calculations allowed the Apollo 11 crew to touch down on the Moon in 1969, and return safely to Earth. The rocket in this experiment is a model of the Space Launch System, which will launch the Orion spacecraft and crew to the Moon.



Katherine Johnson



**1** Go to [tinyurl.com/SN-minirocket](http://tinyurl.com/SN-minirocket). Print and cut out the template. Wrap the rocket's body around a pen (white end at the top). Fix with tape to make a tube.



**2** You should now have a long cylinder. Fold the fins along the solid line, and attach them to the base of the rocket (the orange end) at right angles.



**3** Twist the white end around the pen's point (make sure no air can escape). Remove the pen and pop your rocket on a straw. Blow hard to launch.