

How Big Was the Command Module?

The Apollo command module was a tight fit for three astronauts. Its inside height was a little more than 9 feet, the same as most home ceilings, but cone shaped. In this activity, you will use yarn to re-create the shape of the command module to get an idea of how big it really was . . . or wasn't.

YOU'LL NEED

- ☾ Large room
- ☾ Yarn
- ☾ Tape measure
- ☾ Painter's tape
- ☾ Stepladder
- ☾ 8 heavy books
- ☾ Adult helper
- ☾ 2 friends

1. Using a tape measure, cut eight 12-foot lengths of yarn.
2. Hold one end of each piece together and tie them into a knot.
3. Ask an adult to use a stepladder and painter's tape (to prevent damage) to

stick the knot to the ceiling in the center of a large room. Move furniture if necessary.

4. Measure out $6\frac{1}{2}$ feet from where the yarn hangs to the floor. Gently pull one strand of yarn out to that point and hold it in place with a heavy book. The string should not sag.
5. Measure $6\frac{1}{2}$ feet in the opposite direction, then hold a second length of yarn in place with another book.
6. Repeat this process with the remaining yarn and books. It should look like a cone when done.

7. Stand inside the "capsule" with two of your friends. Can you imagine flying to the moon in a spacecraft this size, for a week or more?

