

| ame: | | | |
|------|--|--|--|
| | | | |

1|||||1

Date:

ACTIVITY: STEM SPACE LANDER CHALLENGE

In Martian Beach Party, Mindy and Guy Raz crash-land the Wow Machine on Mars. Your mission: to design and build a lander using only the allowed materials. The cup will be the cabin and the marshmallows are the astronauts. The objective is to design a lander that keeps the astronauts in the cabin when the lander drops from a distance.

MATERIALS

2 marshmallows plastic cup 3 index cards a paper plate 6 straws yard of masking tape





wow-To

- 1. Brainstorm how you might be able to softly land your two "astronauts" (the marshmallows) using these materials. The two astronauts must be inside the cup, and the cup must remain open.
- 2. Make a sketch of your design.
- 3. Using your sketch as a guide, build a lander using only the allowed materials.
- 4. Test your lander by dropping it from a height of about one foot.
- 5. If the "astronauts" bounce out or the lander tips over, figure out ways to improve your design and retest!
- 6. If you like you can do advanced testing by dropping the lander from higher heights.



🔝 LISTEN & LEARN

In this episode of Wow in the World, the podcast for curious kids, Mindy + Guy Raz go on an intergalactic adventure to Mars as they learn about recent NASA research about the beaches of Mars!

Click here to learn more about



