



# Zero Gravity Indicators

## Exploring the Moon



**RESPOND** to NASA's information about Zero Gravity Indicators (ZGIs) and the role they play during space travel. What does the crew learn from the lightweight object that floats inside the space capsule? Why is it important to have real-time visual confirmation that the spaceship has reached microgravity (also known as zero gravity or a weightless environment)?

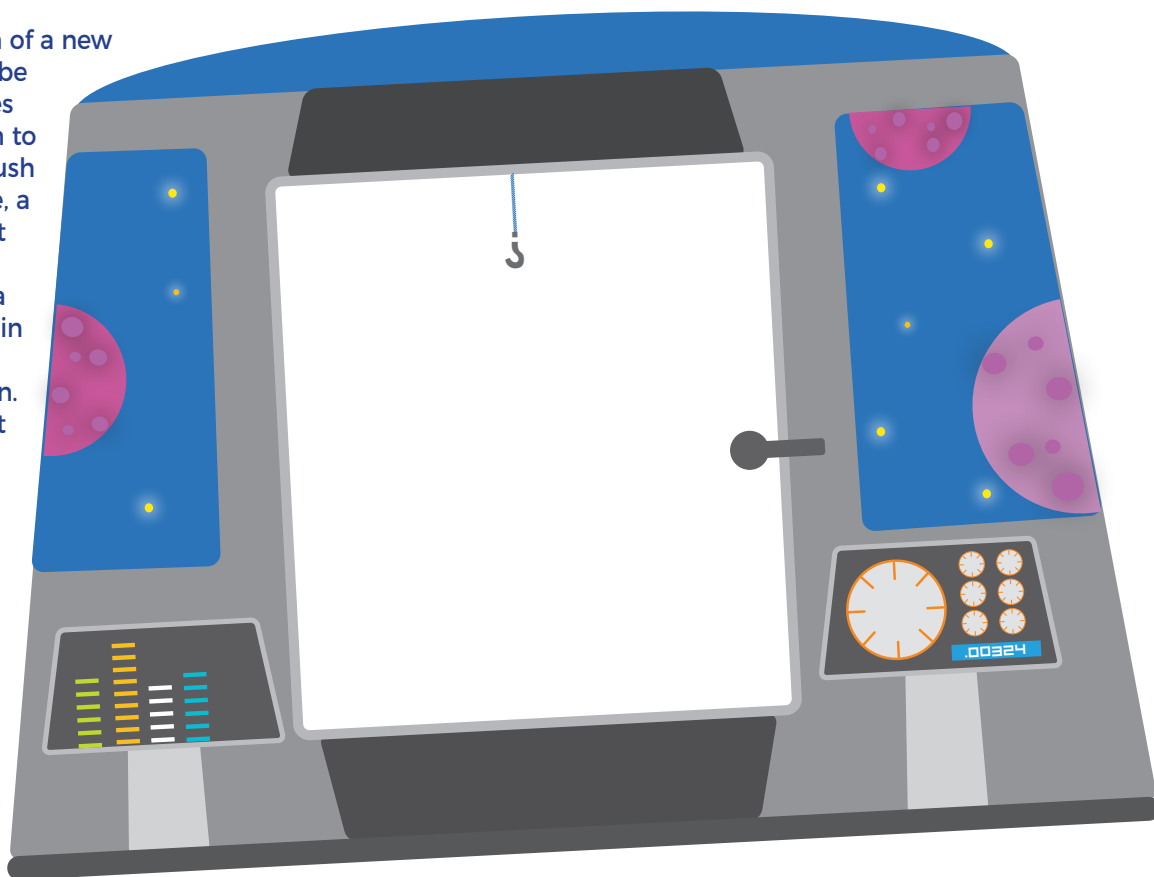


**CONNECT** the guidelines that NASA has for these non-scientific objects with the creative flexibility that opens possibilities for what they can look like. They must be small and lightweight and able to be tethered to the spacecraft's interior with a string. They can't have sharp edges. These objects are often whimsical and symbolic to the astronauts, reminding them of home, community, or something that is personally significant. ZGIs are also designed to engage the general public—so they are intended to be fun. These objects help non-experts understand the transition to microgravity, making that moment tangible and relatable.



**CREATE** a sketch of a new ZGI. You could be inspired by ones that have flown to

space before, including a plush Baby Yoda, an origami crane, a handmade toy dinosaur that an astronaut crafted out of food packaging scraps and a T-shirt, and Snoopy dressed in a customized spacesuit that flew on the Artemis I mission. Or you could create one that hasn't been seen before—a fully original design.



Sasha S.



Aithan V.



**PRESENT** your sketch, and describe the object you designed as a ZGI. Explain why you chose this object or character and the features included in your design that support the functions of this important instrument.



Ananya V.

### Note for teachers and parents:

For more creative inspiration and hands-on explorations go to [Crayola.com/CreativityWeek](https://www.crayola.com/CreativityWeek). To share student artwork on social media please post using #CrayolaCreativityWeek

**PEANUTS**

*Shoot for the Moon, Snoopy!*  
Simon & Schuster  
Text copyright ©2019  
Charles M. Schulz and Jason Cooper  
Illustration copyright ©2019 Vicki Scott



Learning

Color Inspires Creativity  
Thinking Sheet

©2025 Crayola