



**SYNERGISTIC  
SYSTEMS**

A DIVISION OF PITSCO, INC.

# PARENT BRIEFING

## Module

# Rocketry & Space

- Understand the history of U.S. space exploration and the development of rocketry by viewing a video segment.
- Observe rocket aerodynamics and flight by launching a model rocket and measuring its altitude.
- Comprehend certain scientific principles as they relate to rocketry and space flight.

## Session Focus

- 1 History of Rocketry & Space
- 2 Model Rocket Parts
- 3 Model Rocket Assembly
- 4 Recovery Systems
- 5 Model Rocket Assembly
- 6 Opposing Forces
- 7 Life in Space

### Dear Parent,

As parents and teachers, we realize it can be hard to get a child to discuss what he or she is learning in school. We hope the information provided on this page will assist you in communicating with your child about what he or she is learning.

For the next few days, your child will be learning about the development of rocketry and the space program while completing the Rocketry & Space module. As your child's best teacher, your participation in the learning process is extremely important.

### Words students will learn in this module include:

- astronaut
- space shuttle
- NASA
- commander
- orbiter
- countdown
- payload
- boost
- SRB (solid rocket booster)
- EMU (Extravehicular Mobility Unit)
- propellant

### Questions for discussion

During the course of this module, your child will be assessed on key concepts and activities. You might want to discuss these concepts with your child.

He or she will be asked to:

- Explain the scientific principle employed when the space shuttle lifts off. (*Newton's Third Law states the for every action there is an equal but opposite reaction. This principle explains how the shuttle can be lifted off the ground.*)
- Describe the main stages of rocket flight. (*Ignition, liftoff, burnout, apogee, ejection.*)
- Name at least three individuals who played significant roles in rocketry and space flight history. (*Names might include: Jules Verne, Alan Shepard, Jr., John Glenn, Edward White II, Neil Armstrong, W. Young & Robert Crippen, Sally K. Ride, and Guion Bluford.*)



Instructor: \_\_\_\_\_