PROGRAM **DESCRIPTION**

Pathfinder is a shorter version of the weeklong camps. Designed to accommodate groups, the Pathfinder program is a three-day program including a shuttle mission, space history and astronaut training. Groups have the option to attend Monday to Wednesday, Wednesday to Friday, or Friday to Sunday sessions.

ACTIVITIES

Space History (4.5 hours)
NSTA Standard: History and Nature of Science: Science as a Human Endeavor, History of Science

In a program started by rocketry pioneer Wernher Von Braun, it is not surprising that Pathfinder trainees learn indepth about the history of the space program. The classroom for these lessons is the U.S. Space and Rocket Center museum, the home of one of the world's largest collections of actual space hardware. In this engaging setting, trainees discover that the space program, like other scientific endeavors, requires the efforts of a wide variety of people and that its accomplishments were the result of incremental tests and experiments.

MERCURY

Trainees discover how NASA chose the first seven astronauts and what they accomplished.

GEMINI

Here trainees learn the steps that NASA took to test the many manuvers and procedures that would eventually take us to the moon.

APOLLO

This session chronicals some of the most exciting moments in the space race. Trainees find out how NASA recoved from the tragic Apollo 1 fire, how engineers designed the vehicles that transported men to the moon and what astronauts and scientists discovered from these trips.

SHUTTLE EXHIBIT

Trainees expore the new Space and Rocket Center shuttle exhibit and discuss the highlights of twenty years of shuttle flights.

ROCKET PARK/SHUTTLE PARK

Trainees participate in a scavenger hunt in Rocket Park, a collection of the launch vehicles America used to launch astronauts into space including the largest rocket ever lauched, the Saturn V and a full size Space Shuttle model.

MUSEUM HUNT

Another scavenger hunt allows the trainees to explore all of the space memorabilia inside the Space and Rocket Center museum including a moon rock, an Apollo capsule and last remaining fragment of Skylab.

SPACE BOWL

These game show style sessions review the information the trainees have learned throughout the week.

Astronaut Training (8.5 hours)
NSTA Standard: Physical Science; Motions and Forces

This component of Pathfinder utilizes the excitement of astronaut training to teach scientific concepts. Pathfinder trainees can define acceleration, gravity and Newton's Laws of Motion in terms of their own experiences on a wide variety of training simulators.

1/6TH CHAIR
The trainees find out how it would feel to walk on the moon, where there is only one sixth of the Earth's gravity, in this simulator inspired by the Apollo program.

MULTI-AXIS TRAINER
This simulator, modeled after a trainer used in the Mercury program, allows the trainees to experience the disorientation astronauts would feel if a capsule went into a tumble spin. Manned Maneuvering Unit (MMU) Shuttle astronauts tested a jet pack known as the MMU in 1984. Trainees learn the six degrees of freedom as they test our MMU simulator.

G FORCE
This simulator is designed to prepare trainees for the forces of acceleration experienced by astronauts during launch, the times the force of Earth's gravity. This is an outdoor simulator and may be closed due to inclement weather.

SPACE SHOT
This exciting simulator launches the trainees 140 feet in 2.5 seconds allowing them to feel four times the force of Earth's gravity and 2-3 seconds of freefall. This is an outdoor simulator and may be closed due to inclement weather.

MISSION TO MARS SIMULATOR
This motion-based simulation features a roller coaster ride on our neighboring red planet Mars.

CLIMBING WALL Although trainees do not undergo the intense physical training of astronauts, they do test their strength on the Mars Climbing Wall.

IMAX®
Trainees experience one Omnimax films during the week.

ROCKET CONSTRUCTION AND LAUNCH
Pathfinder trainees discover how rockets function by creating and launching their own Estes rocket.

Missions (3.5 hours)
NSTA Standard: Science and Technology; Understanding about Science and Technology

The mission is the highlight of the time at camp, and missions are better than ever in the new Mission Center Complex. During a mission, the trainees take on the role of a member of mission control or a member of a shuttle flight crew. Throughout the experience, trainees discover that the technological designs have constraints and that its development and use requires the combined efforts of many people.

SHUTTLE ORIENTATION
This presentation is designed to teach trainees the basic systems of the Space Shuttle. The emphasis is placed on the vocabulary and concepts the trainees will need to understand the simulated mission.

MISSION TRAINING
Pathfinder trainees experience a 2-hour mission. Each member of the team will be trained in a specialized role in Mission Control or the Orbiter and Space Station simulators.

MISSION
The trainees work together to launch the shuttle to the International Space Station, to complete experiments that approximate those conducted in space and to return the crew to Earth in each one –half mission. Problem solving and communication is key as problems, or anomalies, arise. **Minimum Team size is 12 people / Maximum Team size is 16. Your group size will need to correlate with the team sizes. Example: If you have 20 people in your group you will not have enough to have 2 teams. You will need 24 to have 2 teams of 12. If your group is only 20 people, 16 will participate in the mission and 4 will not.

Cost of the Pathfinder Program
4-H Rates for groups not attending in more than three years:
$205 from September through February and $249 from March through August
4-H Rates for returning groups: $212 from Sept. to Feb. and $259 from Mar. to August.

Arrival time
Mon., Wed., or Fri. is noon to 1:00 p.m. Central Time.
Departure time on Wed., Fri., or Sun., is by 11:00 a.m. Central Time.
Please contact a Group Reservations Coordinator for available dates.

Meals included are:
Dinner the 1st night, all three meals the 2nd day and breakfast on the 3rd day.

PAYMENT SCHEDULE
$150.00 registration fee is to be paid at the time of booking to reserve your date.
This fee is non refundable and is not applied towards any tuition.

90 days prior to arrival a 50% deposit is due. This is 50% of your group attendance total.
60 days prior to arrival a Final payment is due. Please have numbers finalized prior to this date. A $25.00 administrative fee will be charge per change after 60 days prior to arrival.
No changes will be done after 30 days prior to arrival.

Please make one form of payment to the U.S. Space & Rocket Center if sending a check.
If multiple checks are received for either a deposit or a final payment they will be returned back to the Group leader.
Credit Cards are accepted from the School or group leader.

Your group trip may be canceled or rescheduled, by the Space Center Reservations Coordinator, if the payment schedule, is not followed.

CANCELATIONS AND REFUNDS
Your group trip may be canceled or rescheduled in an event of an Act of God situation.
All necessary arrangements will be made and efforts exhausted to reschedule your trip.

Individual Refunds will only be given for the following reasons.

1. A death in the family.
2. An illness of the person scheduled to come on the trip. (Dr.'s excuse required)
3. A transfer of a Military adult, or a transfer of a child out of the school district. (Documentation required)

**An adult or child will not be able to receive a refund if they are DECAMPED from Space Camp due to misbehavior and/or inappropriate conduct.

**Space Camp will not be responsible for Decamped trainee's travel expenses back home.