BECOME A LUNAR RANGER
EXPLORE CRATERS OF THE MOON AND BEYOND!

Follow in the footsteps of the Astronauts:
In 1969, Apollo Astronauts Alan Shepherd, Eugene Cernan, Joe Engle and Edgar Mitchell visited Craters of the Moon to learn about the geology of their own backyard before venturing beyond the Earth.

The astronauts visited Craters of the Moon for many of the same reasons that you are here today. Complete the following checklist in order to receive your own Lunar Ranger mission patch:

___ “Orbit’ the Monument on the 7 mile loop drive or tour the Visitor Center.
___ Complete the Safety activity on the next page
___ Look for the Earth, Moon or Star symbol next to each activity
   If you are 8 years old or younger complete 4 other activities.
   If you are 9 years old or older complete 6 other activities.
___ When you finish report back to Mission Control (The Visitor Center) in order to receive your mission patch.

If you don’t finish your book while you are here, you can mail it to us. We’ll check it and send your book back along with your patch. Mail it to:
Craters of the Moon National Monument and Preserve
P.O. Box 29
Arco, ID 83213
Safety on the Moon
Whether you are an astronaut or a Junior Ranger, there are certain things that you should always have with you for a safe journey.

Draw a line from each object you would need to bring to have a safe trip to the Moon to the picture of the Moon. Do the same for Craters of the Moon.

*Some items are needed for both places.*
The area appears “like the surface of the Moon as seen through a telescope”
Harold T. Stearns, USGS Geologist, 1923

Learn from an expert:
Attend a Ranger program _____________________________________________
(Name of Program and Ranger’s initials

Go “Moon” walking:
Explore any trail in the Monument and play Craters of the Moon Bingo.
Use your detective skills to look for, **but not collect**, what is pictured below. Each picture is some thing interesting found at Craters of the Moon.

Circle any that you see.

- Mule Deer
- Monkeyflower
- Lava Bomb
- Animal Tracks
- Lava Tube
- Chipmunk
- Squirrel
- Draw your own
- Pahoehoe
- Shrub
- Clark’s Nutcracker
- Cinder
- Buckwheat
- Bluebird
- Ranger

Leave only footprints, take only pictures and memories:
I did my best to protect this special place on planet Earth by not picking wildflowers, collecting rocks or feeding chipmunks. I also helped by staying on the trails and by putting litter in the proper place.

My signature ___________________________________________ Parent’s signature ___________________________________________
Ask a Ranger to show you the video “Return to the Moon” and answer these questions to learn the names of the Apollo 14 astronauts that visited Craters of the Moon before they journeyed to the Moon.

Circle the letter under “true” if the statement is true. Circle the letter under “false” if the statement is not true. Use the letters to spell the names of the Apollo 14 Astronauts.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In 1969 people first walked on the Moon.</td>
<td>E</td>
<td>Q</td>
</tr>
<tr>
<td>2. Craters of the Moon is a good place to study lava flows.</td>
<td>J</td>
<td>P</td>
</tr>
<tr>
<td>3. The Moon’s craters are volcanic craters.</td>
<td>I</td>
<td>O</td>
</tr>
<tr>
<td>4. Craters of the Moon is one of the best places to study geology.</td>
<td>D</td>
<td>T</td>
</tr>
<tr>
<td>5. The National Park Service is dedicated to preserving Craters of the Moon for everyone.</td>
<td>A</td>
<td>E</td>
</tr>
<tr>
<td>6. The advice given to kids in the video is to dream.</td>
<td>L</td>
<td>D</td>
</tr>
<tr>
<td>7. The more we uncover, the more questions open up to us.</td>
<td>N</td>
<td>M</td>
</tr>
</tbody>
</table>

__Euge__ne Cernan  __E__e Engle  E__g__r Mitchell  A__a__ Shepard
1  2  3  4  5  6  7
The Moon has no large craters like we have here on Earth. However, it is covered with vast plains of similar to what you see at Craters of the Moon.

The Moon's volcanic activity took place billions of years ago when broke the surface allowing lava to fill the craters. The volcanoes that erupted at Craters of the Moon did so only 2000 ago and are likely to again someday.

The craters on Earth's Moon were created by impacts.

The craters at Craters of the Moon were created by .

Design your own Mission Patch:

The Mission Patch for the Apollo 14 journey to the Moon was designed by the crew members and looked like the picture below.

Design your own Craters of the Moon mission patch in the space to the right.
“The Eastern Snake River Plain is an ideal place to observe Mars-like volcanic features...”
Scott Hughes, Geologist, Idaho State University

National Park Service (NPS) Mission:
- To preserve and protect...the national park system for the enjoyment, education and inspiration of this and future generations

National Aeronautics and Space Administration (NASA) Mission:
- To understand and protect our home planet...
- Explore the universe and search for life...
- Inspire the next generation of explorers...

List 2 things that the NPS and NASA missions have in common.
________________________________________________________  _______________________________________________________

Intergalactic Parks?
There are many special places on this planet that are set aside as national parks so that we can enjoy them and take care of them. Describe a place beyond earth that you think should be preserved as a park.

I choose__________________________to be the first Intergalactic Park.
Explain why it should be a park.....  Draw a picture of a Ranger at your new park.
Scientists have discovered volcanoes on several other planetary bodies within the Solar System including our moon, Mars, Venus and Jupiter’s moon Io. Planetary geologists continue to study the volcanic features in our own backyard to better understand volcanoes on other planets. Draw a line from the images below to their matching descriptions:

Most recently active volcano at Craters of the Moon. Eruptions occurred from a vent near Broken Top Cinder Cone about 2000 years ago. Many scientists predict that Craters of the Moon will erupt again in the future.

The tallest volcano in the Solar System. Olympus Mons towers over 72,000 feet (22,000 meters) above the surrounding Martian plains.

The most active volcanoes in the Solar System (outside of Earth). This satellite image shows a volcano erupting into space from the surface of Jupiter’s moon Io.

The tallest volcano at Craters of the Moon. Big Cinder Butte is only 700 feet (218 meters) higher than the surrounding terrain.
Craters of the Moon Lunar Ranger Pledge:

As a Lunar Ranger, I promise to...
* Explore the Earth in order to reach for the stars...
* Take care of Craters of the Moon and other special places so they will always be here for me (and future generations) to enjoy...

Name_____________________________________________________

For more information on Craters of the Moon National Monument and Preserve or to become a Geo-Ranger, go to WWW.NPS.GOV/CRMO

For more information on NASA, go to WWW.NASA.GOV
If you would like to become a Web Ranger and earn another patch, go to WWW.NPS.GOV/WEBRANGERS