



# NOVA AWARD

CUB SCOUTS  
ELEMENTARY SCHOOLERS

Use this tracking tool for the Out of this World Nova Award for Cub Scouts

CUB SCOUT NAME: \_\_\_\_\_

## Activity

## Campground Area

## Completed?

Read articles or watch videos of space exploration, space, planets for a total of 1 hour

Launch Pad  
Dining Hall  
*All subject days*

Complete 1 adventure from the next page for your current rank

See rank  
advancement page

Have a star party with your family and find 5 different constellations and draw them

Dark Side of the Moon  
*Astronomy*

Visit a place where space science is being done

Launch Pad  
*Space Exploration & Live Webinars*

**Complete 1 of the following** (find details on Mission Control and on the next page):

Design a model Mars rover that would be useful to explore the planet's surface

The Lab  
*Robotics*

Design an inhabited base located on Mars or the moon

The Lab  
*Space Exploration*

Investigate and make models or diagrams of solar and lunar eclipses

The Lab  
*Astronomy*

Explain how "revolution," or "orbit," compares with "rotation" when talking about planets and the solar system

Launch Pad  
*Astronomy*

Meet with a Nova Counselor to discuss what you've learned.

Zoom Meeting  
or on own

**NOTE: Lions and Tigers are not eligible to earn the NOVA Award**, however there are plenty of activities and advancements that will be completed during Cyber Summer Camp. In addition, all activities during Cyber Summer Camp are for the Cub Scouts new rank (i.e. Cub Scouts exiting the first grade in May of 2020 will be Wolves at Cyber Summer Camp).



# NOVA AWARD

CUB SCOUTS  
ELEMENTARY SCHOOLERS

**Use this tracking tool for the Out of this World Nova Award for Cub Scouts.  
Below are details for each requirement.**

- Read articles or watch videos of space exploration, space, planets for a total of 1 hour** (*Launch Pad*)
- Complete ONE adventure from the following list for your current rank** (*throughout the campground*)
  - Wolf** = Collections and Hobbies or Motor Away
  - Bear** = Robotics or Super Science
  - Webelos** = Adventures in Science or Engineering
- Have a star party with your family** (*Dark Side of the Moon*)
  - Find five different constellations and draw them.
  - Share your drawings with your family. Discuss whether you would always be able to see those constellations in the same place.
- Visit a place where space science is being done, used, explained, or investigated.** (*Launch Pad*)
- Complete 1 of the following** (*The Lab or Launch Pad*):
  - Using materials you have on hand, design a model Mars rover that would be useful to explore the rocky planet's surface. Share your model with your family and explain the following:
    - The data the rover would collect
    - How the rover would work
    - How the rover would transmit data
    - Why rovers are needed for space exploration
  - Design on paper an inhabited base located on Mars or the moon. Consider the following: the energy source, how the base will be constructed, the life-support system, food, entertainment, the purpose and function, and other things you think would be important. Then do the following:
    - Draw or build a model of your base using recycled materials.
    - Discuss with your family what people would need to survive on Mars or the moon
  - Investigate and make models or diagrams of solar and lunar eclipses. (Example: You may wish to use balls of different sizes and a flashlight to represent the sun.)
    - Using your model or diagram, discuss eclipses with your counselor, and explain the difference between a solar eclipse and a lunar eclipse.
  - Explain how "revolution," or "orbit," compares with "rotation" when talking about planets and the solar system. Show these by walking and spinning around a member of your family. Do the following:
    - Choose three planets to investigate (you may include the dwarf planet Pluto). Compare these planets to Earth. Find out how long the planet takes to go around the sun (the planet's year) and how long the planet takes to spin on its axis (the planet's day). Include at least TWO of these: distance from the sun, diameter, atmosphere, temperature, number of moons.
    - Discuss what you have learned with your family.
- Meet with a Nova Counselor to discuss what you've learned.**

**NOTE: Lions and Tigers are not eligible to earn the NOVA Award**, however there are plenty of activities and advancements that will be completed during Cyber Summer Camp. In addition, all activities during Cyber Summer Camp are for the Cub Scouts new rank (i.e. Cub Scouts exiting the first grade in May of 2020 will be Wolves at Cyber Summer Camp).