



## ***Let's Go To The Moon***

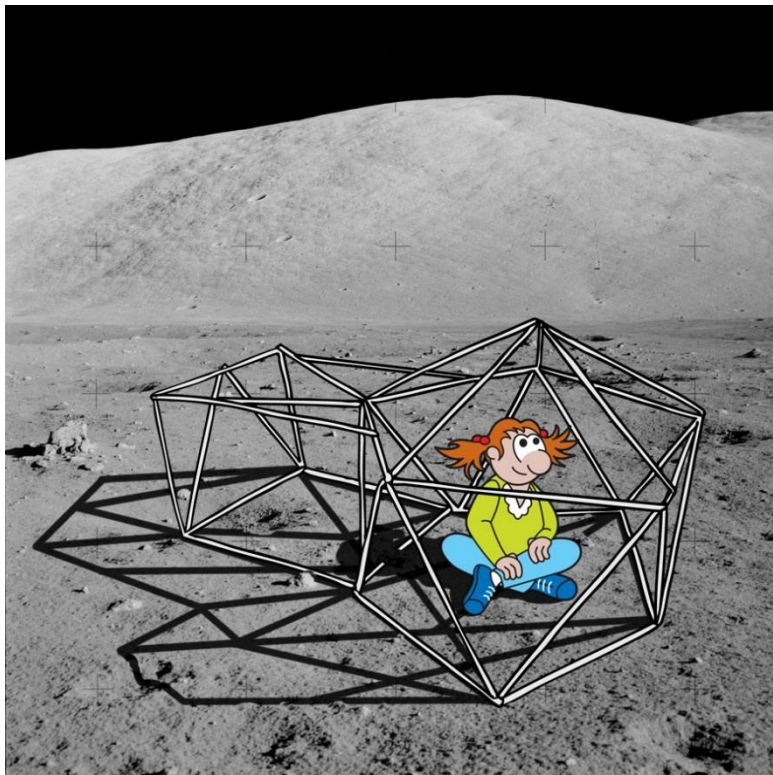
No human has walked on the Moon since the Apollo 17 mission in December 1972. However, the time has come to send Cub Scouts to the moon. They will stay much longer than the few days of the Apollo 17 mission and so they will need to construct a Moon habitat or home, a place where a crew of Cub Scouts can live for months.

Their home must protect them like no home on Earth would ever need to do. Why?

There is no air on the Moon. The temperature varies from minus 233 Celsius at night to +123 Celsius in the day. No atmosphere means no protection from the Sun's harsh radiation.

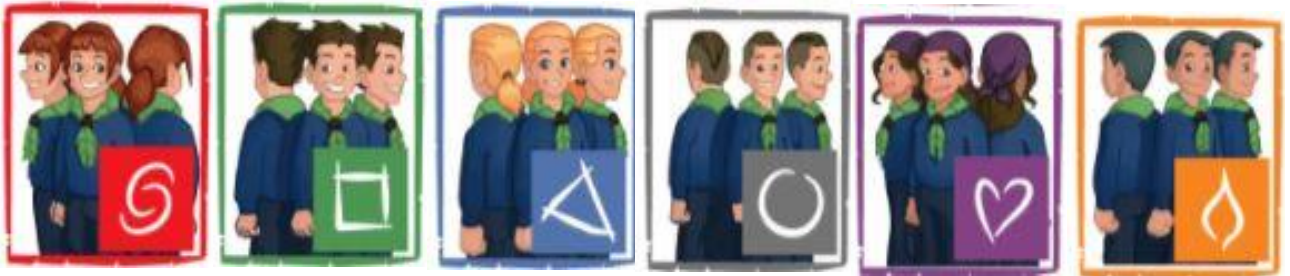
The materials to build the Moon habitat should be lightweight, since they will have to be boosted out of Earth's gravitational field using rockets. The habitat will have to be sent to the Moon in pieces and assembled by the Cub Scout astronauts once they arrive.

As with any Moon habitat, it must have an airlock. The airlock is a small room between the door to the outside and the door to the inside.



## Plan

*Which Travel Cards could we use?*



This subject is so broad that any of the Travel Cards can be used both individually or in various combinations.

*Can we use any Adventure Skills?*

Yes. The lower stages of Pioneering, Emergencies, Air, Backwoods, even Camping could all be incorporated into a lengthy imaginative programme cycle planned around survival skills for space exploration.



**DO****Materials you will need to build one Moon habitat:**

- 148 sheets of newspaper (preferably broadsheet —tabloid size is too small—and use the full square spread)
- Pencil
- Masking or packaging tape
- Scissors
- Measuring tape
- Stapler (heavy-duty, if available)
- More newspapers for "walls", or use white/grey bin liners, cut along the seams
- White PVA glue or glue stick

**Construct the Moon habitat:**

1. Use four sheets of newspaper to build each log. Lay the sheets out flat, one on top of the other.

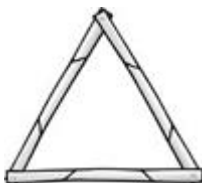


2. Set the pencil in the corner and roll across on the diagonal. Use the pencil to help you get started, and then remove the pencil. Roll evenly, but don't try to make the logs as thin as the pencil. When you get to the opposite corner of the paper, you will have a tube or log. Tape the log shut.

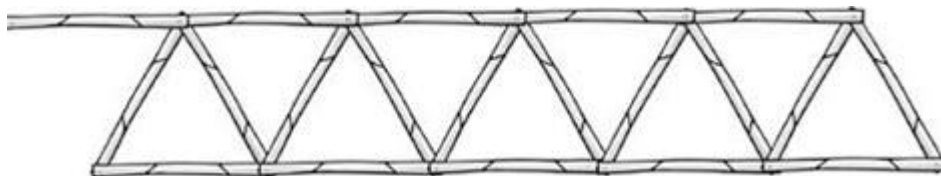


Repeat this process until you have 37 logs. Then trim the ends a bit, making sure all the logs are the same length. They should be around 30 inches long.

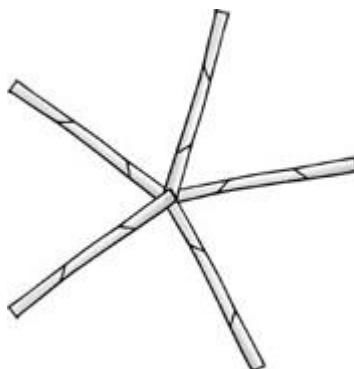
3. Staple three logs together to create a triangle. Repeat until you have five triangles.



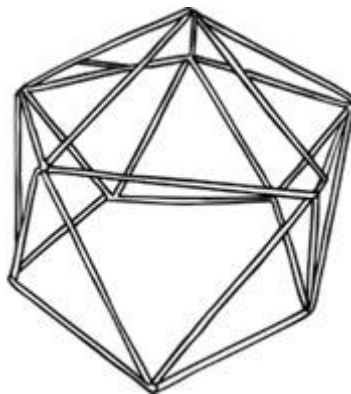
4. Staple the five triangles to each other at their bottom corners. Add connecting logs across the top.



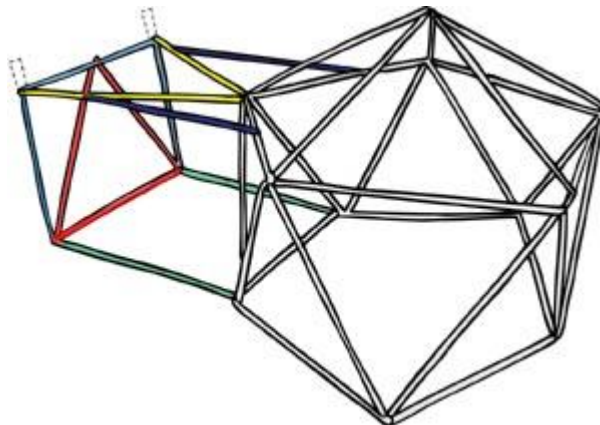
5. Staple the remaining five logs together at the centre to make a star.



6. Then raise the five connected triangles, or walls, off the floor and staple the ends together to form a five-sided (pentagonal) structure. It helps to have a Sixer to hold up the walls while another Sixer staples.
7. Now staple the free ends of the star to the junctions of the triangles on the top of the base, and the structure will stand by itself.



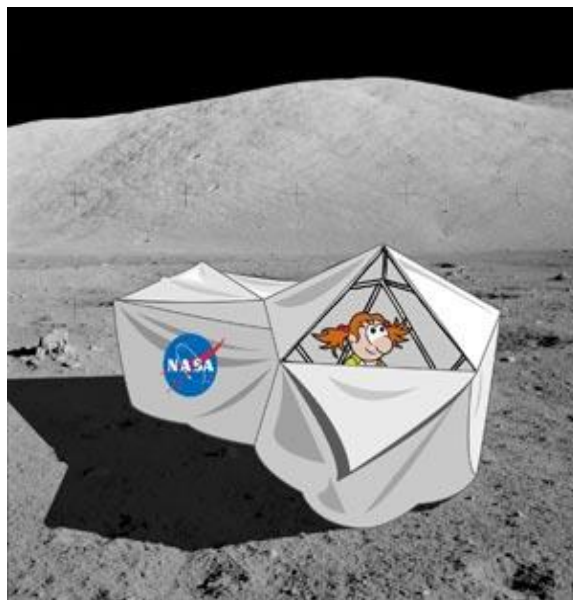
**Construct the "airlock:"**



8. There should be 12 logs left. These will make the "airlock." Staple three logs together to make another triangle (red in above drawing). Use two more logs (green) to attach the base of this triangle to one of the base logs of the "habitat." This triangle becomes the airlock door.

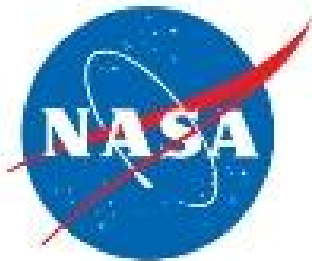
9. Using three more logs (blue), create a square by stapling them around the "door." The side logs might be a bit too long, so cut them off to make a square.
10. Use two more logs (yellow) to make a triangle to support the airlock at the top. To do this, staple the ends to the two top corners of the square and staple the other ends together where the triangles meet on the habitat.
11. Use the last two logs (purple) to stabilize the airlock as shown in the drawing.

**Fill in with solid walls:**



12. Give the structure "solid" walls by carefully covering each section with newspaper or plastic sheets. To do this, smear glue onto the logs and gently press pieces of newspaper or plastic onto the triangles. Don't forget to leave a door! You can cut off the loose edges of the tissue paper.

Don't forget your preferred Space Agency logo. Print off, cut it out then glue it to the outside of your Moon Habitat.



**USA**



**CANADA**



**INDIA**



**JAPAN**



**CHINA**



**RUSSIA**

**RUSSIA**



**European Space Agency**

## Review



Gather the Cub Scouts in their Sixes and with the help of a Scouter, perform the review. Each Cub Scout can mark off parts of their travel cards which is relevant to their role in the activity making sure that **Turas**, **Taisteal**, and **Tagann** are all catered for.

The Scouter can also review the competency and skills achieved on the Adventure Skills badges.

We would love to see photos of your moon habitats and the Cub Scouts who have chosen to engage in the space travel programme.

Please send photos to [cubscouts@scouts.ie](mailto:cubscouts@scouts.ie) or follow us on Facebook @cubscoutsSI