Moon on a Stick!

Objective
To learn the phases of the moon through this simple hands-on activity.

Materials Needed to Create Moon
- 3”- 4” Dylite Styrofoam ball (found at craft stores; doesn’t crumble when touched)
- 6” length of 1/8” dowel rod
- Hot glue gun (Parental Guidance)
- Drill (Parental Guidance)

Construction
1. Drill a hole 1” deep into the bottom of the ball.
2. Fill the hole with hot glue.
3. Immediately insert dowel rod into hole and hold in place for 30 seconds as glue dries.
4. Voila - moon on a stick! Make as many as you need for the members of your family or group.

Materials for Activity
- Moon on a stick
- Lamp with light bulb and no lamp shade
- Extension cord
- Dark room (the darker the better)

Activity
1) Place lamp in center of the room.
2) Have everyone make a large circle around lamp, making sure no one is between them and the lamp.
3) Distribute a moon on a stick to each person.
4) Turn off lights; turn on lamp.
5) Each person will bend their elbow so that their moon is held out in front of them.
6) The lamp is the sun. The moon is the moon. Your head is the earth. This activity is from the perspective of the individual holding their own moon.
7) Hold the moon in front of you so you have no light shining on the side of the moon in your view. This is a new moon.
8) With you moon held in place, rotate your entire body slightly to the left until you see a crescent shape of light appear on your moon. This is a Waxing Crescent. Remember, if white (or light) is on the right it gets brighter each night!
9) Continue to rotate to the left until ½ of the face of the moon that you can see is covered in light. This is a First Quarter Moon.
10) Continue until the moon is almost completely covered in light except for a sliver or crescent of a shadow. This is called a Waxing Gibbous.
11) When your moon is completely bathed in light this is a Full Moon and everyone can howl like a wolf!
12) Now as you continue to the left the light will be on the left and slowly leave the face of the moon as you rotate. Remember, if white is on the left, there is not much left!
13) First stop is a Waning Gibbous!
14) Last Quarter!
15) Waning Crescent!
16) Now you should be back to a New Moon which means your moon is completely bathed in shadow from your perspective of vision.
17) Have Fun with this and go out and see if you now know what phase the moon is in today!

Submitted by Pete Stobie, Kalamazoo Nature Center