My Book About The Moon Student Activity Book

Dear Parent,

Your child has checked out a Moon Box with materials included to conduct some science experiments at home. This kit is provided so that families may be actively involved in doing science together. This kit may be checked out for two days, and then needs to be returned to the classroom.

Please be sure that the flashlight, mirror, Styrofoam ball, bowl of flour, and small rocks are returned with the kit. Your child may keep the *My Book About The Moon* student activity book.

Suggestions for using the kit:

- Reserve 30 minutes for the kit activities during the week.
- Listen to each other.
- Offer assistance only when needed.
- Ask questions such as. . . .
 - What happened?
 - **Why** do you suppose that happened?
 - Where have you seen this happen before?
 - What do you think would happen if ?
- Accept answers your child gives.
- Enjoy the time together!

Moon Box Activities

Moon Phases

- Begin with the Styrofoam ball and pencil. Hold the ball with the X facing you.
- Have someone on the other side of the ball shine the flashlight on it. Do this in a really dark room. You will not see the lighted half of the ball. It is a new moon. Stand on one spot.
- Turn your body counter clockwise a bit while holding the ball in front of you and a bit above your head—always keeping the X toward you. You will see a small part of the lighted half. It is a crescent moon.
- Keep turning, and soon you will see more of the lighted half. It is the a first quarter moon.
- Keep the ball above your head and turn some more. Soon you will see all the lighted half of the ball. The moon is full.
- Keep turning and you will see less and less of the lighted part of the ball. You will see one quarter of it—the third quarter moon. Then you'll see a thin crescent.
- When you have turned all the way around, you have seen all the phases of the moon.

Day and Night

Materials: ball, flashlight, and a sticker placed on your ball

- Put the sticker on your ball to indicate where you live.
- Place the ball on a table or have someone hold it.
- Shine the flashlight on the ball where the sticker is. Is it day or night?
- Turn the ball counterclockwise until the sticker is away from you. Is it day or night?

Draw a picture of what you just did.

How Moon Craters are Made

Materials: Bowl of flour and rocks.

- Smooth out the flour with your hand.
- Drop a rock from different heights and record results.

Height in inches		
Draw a picture of your crater.		

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What is moonlight?

Materials: flashlight, mirror, Styrofoam ball, three people

- Make a triangle using your three helpers.
- One person will hold the mirror. (moon)
- One person will hold the Styrofoam ball. (Earth)
- One person will hold the flashlight. (sun)
- Turn out the lights. Observe the ball.
- Turn on the flashlight and shine the light on the mirror. Hold the mirror so the light is reflected to the ball.
- The moonlight we see from Earth comes from the sun.

Make a drawing of what you did.