



BACKYARD ADVENTURES

LITTLE LAB WEEK 7: NIGHT SKY

EVER WONDER . . . WHY THE MOON SEEMS TO CHANGE SHAPE?

What we learned this week:

- Why the moon seems to change shape.
- That a star is a big glowing ball of hot gas.
- That a shooting star is a burning piece of space rock called a meteor.

Curiosity Circle

This week, the Captain has been wondering about why the sky looks the way it does at night. For example, why does it look like the Moon changes shape? Also, what exactly is a star, and why do stars sometimes seem to be shooting across the sky? We got busy finding out the answers to these questions. First, we learned about the eight main phases of the Moon, and matched up the pictures of the Moon phases from the Mystery Box. We also saw a demonstration of how the Moon moves around the Earth, and explored the answers to these “Ever wonder?” questions: **Ever wonder what a star is?** A star is a big glowing ball of gas. There are billions of stars in space. Some are brighter than others and can be seen from Earth at night. We can’t see most of the stars during the day because the light from one really bright star blocks out all the rest: the Sun! **Ever wonder if a shooting star is really a star?** No – it is actually a space rock burning up in the sky! When space rocks, called “meteoroids,” hit the Earth’s atmosphere and burn up, they are called meteors or shooting stars. They look like streaks of light in the sky. Most meteors burn up in the atmosphere. Large ones can make it through the atmosphere and eventually hit the ground. The remaining rock is called



a meteorite. **Ever wonder why the Moon is so bright? Is it a star too?** No, the Moon is not a star. The Moon is made up mostly of rocks, just like the Earth. The Moon seems to shine because it is lit up by the Sun. **Ever wonder why the Moon seems to change shape?** The Moon doesn’t sit still in the sky; rather, it circles around and around the Earth. One trip around the Earth takes the Moon about four weeks. As the Moon moves, there is a shadow made by the Sun that we see in different ways. Sometimes the shadow is really big; this is when the Moon looks like a tiny sliver in the sky. But sometimes there is no shadow at all. This is when we see a bright, shiny Full Moon! **Ever wonder if you could live on the Moon?** You couldn’t live on the Moon because it has no air or water. No plants or people live there. Astronauts need special equipment



to visit the Moon.

Curiosity Centers

- ◆ **Discovery Activity:** We used special blacklight pens to trace glowing stars on the shadow wall, then added glowing tails to make meteors.
- ◆ **Manipulative Activity:** We aimed shooting star beanbags at a big blue Earth target.
- ◆ **Art Activity:** We made a fun “shooting star” pencil.



The Round-up & The Big Deal

We learned a fun new song about stars, then played a game where we ran across the room like shooting stars!

Hey, Hey Word of the Day: METEOR

Curiosity @ Home

Look for meteors at night in your own backyard. If you lie still, and don’t get too cold or fall asleep, you should see about five per hour. The darker the sky, the more you’ll see – so if you live in the country, or have a chance to go camping, you’ll see even more! On the next clear, dark night, also take a good look at the Moon. Talk about how the Moon travels around the Earth, and how the shiny, bright part of the Moon is reflecting the Sun. Also point out to your little scientist over the next month how the Moon is changing. Use your new flip book to figure out what phase the Moon is in, then start a “Moon Log” by coloring in a circle to show what the Moon looks like.

Songs & Poems

C-Zone Song (to the tune “I’m a Little Teapot”)
Welcome Song
Welcome to the C-Zone
It’s time for us to start
Exploring and learning
We’ve all got a part
(Spoken) So let’s fasten up our lab coats and get curious!

Song to the Captain (to the tune “Wheels on the Bus”)
The Moon looks like it changes shape (What?)
Changes shape (What?)
Changes shape. (What?)
The Moon looks like it changes shape (What?)
That’s what we call phases!

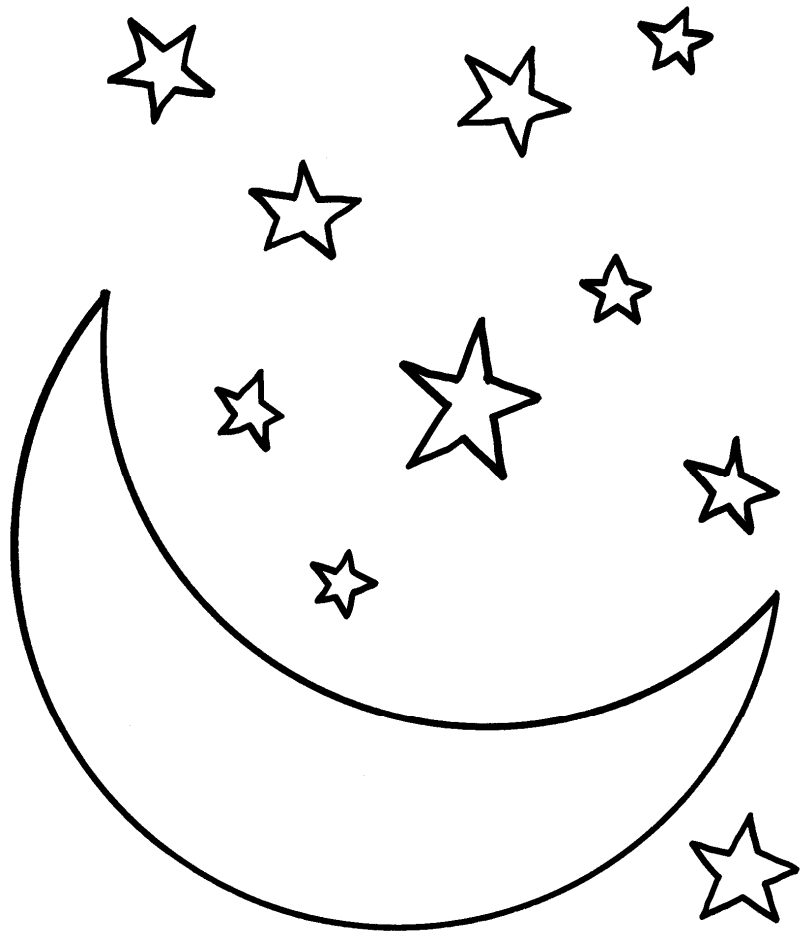
A shooting star is a meteor (What?)
A meteor (What?)
A meteor. (What?)
A shooting star is a meteor (What?)
Now who wants to tell the Captain?

Twinkle Twinkle Little Star
(revised lyrics)
Twinkle twinkle little star
How I wonder what you are
You’re a glowing ball of gas
I know what you are at last!
Twinkle twinkle little star
Now I know just what you are!

C-Zone Goodbye Song
Goodbye from the C-Zone
It’s time for us to go
The learning never stops
Now tell me what you know!



**IS FOR MOON &
METEOR**



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