Why does the Moon look different every night?
The Moon may look like it’s changing constantly; but in reality, it’s constantly orbiting Earth. That means we’re seeing different parts of the Moon illuminated. It takes the Moon about 27.3 days to orbit Earth, but because it spends an extra 2.2 days catching up (Earth travels about 45 million miles around the Sun during the time the Moon completes one orbit,) the full lunar cycle is 29.5 days. At the end of the cycle, the Moon will complete eight phases. This activity will describe each phase and provide a delicious visual!

Take a look at the Moon each night and sketch what you observe on a calendar or plain sheet of paper. This will allow you to chart the progress of each phase.

Before you begin your observation, create an edible Moon or lunar phase chart that will provide a visual example of each phase.

Materials:
- 8 Oreos
- A sheet of paper or paper plate with each phase written on it
- A knife or popsicle stick to scrape off the cream

Directions:
Separate each Oreo and scrape the cream so that each cookie will represent each lunar phase.
Moon /Lunar Phases:

New Moon
During this phase, the side of the Moon facing the Earth is not illuminated. Additionally, the Moon is up during the day, and down during the night. Because of this, we cannot see the Moon during this phase.

Waxing Crescent
At this phase, part of the Moon begins to show. A small sliver of the moon can be seen each evening for a few minutes just after sunset. It is called "waxing" because each night a little more is visible for a little longer.

Waxing Half (First Quarter)
Half of the Moon is visible for the first half of the evening and then goes down, leaving the sky dark.

Waxing Gibbous
All but a little sliver of the Moon is visible. During this phase, the Moon remains in the sky most of the night.

Full Moon
During this phase, the entire Moon is visible. A full moon will rise just as the evening begins and will set in the morning. About every 2.7 years, there are two full moons in the same month. This is referred to as a “blue moon”; hence the saying “Once in a Blue Moon.”

Waning Gibbous
Like the waxing gibbous phase, only a sliver of the Moon is visible. The difference is that instead of the Moon becoming more visual each night, it becomes less visual. This is what the "waning" means.

Waning Half (Last Quarter)
During this phase, half of the Moon is visual.

Waning Crescent
Finally, during the waning crescent phase, only a small sliver of the Moon is visible just before morning. Each night, less of the Moon is visible for less time.