Name: _____ Date: _____

# Make a Moon Phase Chart with Cookies

Circle group

The Moon seems to change shape each night. One week it is a thin curve. Another week it is a bright circle. These shapes are called phases. You can show them with cream-filled cookies and dark paper.

You need eight sandwich cookies, a plastic knife, a plate and a sheet of dark paper. Wash your hands first. Ask a grown-up before you start.

First, twist each cookie open. Keep the half with cream. Use the knife to scrape the cream into a Moon shape. Leave one cookie with no cream. That is the new Moon. We cannot see the Moon then.

Next, shape the others. Make a thin crescent. Leave half the cream for a half Moon. Make a fat shape that is almost round. Leave one cookie with all its cream for the full Moon. Then do the same shapes backward as the Moon gets smaller.

Put the cookies in order on the paper. The Sun always lights half of the Moon. We see more or less of the lit side as the Moon goes around Earth. The whole cycle takes about a month.

## Questions

**1. What are the shapes of the Moon called?**

_____

_____

**2. How many cookies do you need?**

_____

_____

**3. What should you do before you start?**

_____

_____

**4. Which cookie is the new Moon?**

_____

_____

**5. About how long is the whole cycle of phases?**

_____

_____

**6. Why do we see more or less of the lit side of the Moon?**

_____

_____

## Words to know

phases: the different shapes the Moon seems to have
crescent: a thin, curved shape like a banana
scrape: to pull something off a surface with an edge
cycle: a set of steps that repeats again and again
lit: lighted up by a light, such as the Sun

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Make a Moon Phase Chart with Cookies

Triangle group

The Moon seems to change shape from night to night. One week it is a thin curve. Another week it is a bright circle. These shapes are called phases. You can show them with cream-filled cookies and a sheet of dark paper.

You will need eight sandwich cookies, a plastic knife, a plate and a sheet of dark paper. Always wash your hands first, and ask a grown-up before you start.

First, twist each cookie open. Keep the half that has the cream on it. Now use the knife to scrape the cream into a Moon shape. Leave one cookie with no cream at all. That is the new Moon, when we cannot see the Moon at all.

Next, shape the others. Make a thin crescent. Then leave half the cream, for a half Moon. Make a fat shape that is almost round. Leave one cookie with all its cream, for the full Moon. Then do the same shapes backward as the Moon gets smaller.

Place the cookies in order on the paper. The Moon is always half lit by the Sun. We see more or less of the lit side as the Moon travels around Earth. The whole cycle takes about a month.

## Questions

**1. What are the shapes of the Moon called?**

_____

_____

**2. How many cookies do you need?**

_____

_____

**3. What should you do before you start?**

_____

_____

**4. Which cookie shows the new Moon?**

_____

_____

**5. About how long does the whole cycle of phases take?**

_____

_____

**6. Why do we see different amounts of the lit side of the Moon?**

_____

_____

## Words to know

phases: the different shapes the Moon seems to have
crescent: a thin, curved shape like a banana
scrape: to pull something off a surface with an edge
cycle: a set of steps that repeats again and again
lit: lighted up by a light, such as the Sun

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

Name: _____ Date: _____

# Make a Moon Phase Chart with Cookies

Square group

The Moon appears to change its shape from one night to the next. During one week it is a thin curve, and during another it is a bright, round disk. These changing shapes are called phases, and you can demonstrate them with cream-filled cookies and a sheet of dark paper.

You will need eight sandwich cookies, a plastic knife, a plate and a sheet of dark paper. Always wash your hands first, and ask a grown-up for permission before you begin.

To start, twist each cookie open and keep the half that carries the cream. Then use the knife to scrape the cream into the shape of the Moon. Leave one cookie with no cream at all, since that represents the new Moon, when the Moon cannot be seen.

Next, shape the remaining cookies. Make a thin crescent, then leave half the cream for a half Moon, then make a fat shape that is almost round. Leave one cookie with all of its cream to represent the full Moon. After that, repeat the same shapes in reverse order as the Moon shrinks again.

Arrange the cookies in sequence on the paper. The Sun always lights half of the Moon, and we see more or less of that lit side as the Moon travels around Earth. The entire cycle takes about a month.

## Questions

**1. What are the changing shapes of the Moon called?**

_____

_____

**2. How many cookies will you need?**

_____

_____

**3. What should you do before you begin?**

_____

_____

**4. Which cookie represents the new Moon?**

_____

_____

**5. About how long does the entire cycle of phases take?**

_____

_____

**6. Why do we see different amounts of the lit side of the Moon?**

_____

_____

## Words to know

phases: the different shapes the Moon seems to have
crescent: a thin, curved shape like a banana
scrape: to pull something off a surface with an edge
cycle: a set of steps that repeats again and again
lit: lighted up by a light, such as the Sun

## Talk together (every group has these)

1. Find one fact that every group read. How did your sheet say it?
2. What did your sheet tell you that you think another group's did not? Ask them.
3. What is one question about this topic that none of the sheets answered?

# For the teacher: Make a Moon Phase Chart with Cookies

Each student sheet carries a shape, not a level. The same topic and facts, written three ways.

### Circle: Make a Moon Phase Chart with Cookies

Easier · 187 words · Flesch-Kincaid grade 1.1

1. Phases.
2. Eight.
3. Wash your hands and ask a grown-up.
4. The one with no cream.
5. About a month.
6. The Moon goes around Earth, so we see it from a new angle each night.

### Triangle: Make a Moon Phase Chart with Cookies

This passage · 206 words · Flesch-Kincaid grade 1.7

1. Phases.
2. Eight.
3. Wash your hands and ask a grown-up.
4. The one with no cream at all.
5. About a month.
6. The Moon travels around Earth, so we see it from a new angle each night.

### Square: Make a Moon Phase Chart with Cookies

Harder · 224 words · Flesch-Kincaid grade 4.7

1. Phases.
2. Eight.
3. Wash your hands and ask a grown-up for permission.
4. The one with no cream at all.
5. About a month.
6. The Moon travels around Earth, so we view it from a different angle each night.