



Creation Lens

Exploring the World, Discovering God

Grade Level: Grade 5

Title:

The Phases of the Moon & The Seasons of the Church Year

Denomination: Catholic

Lesson ID: ES-G5-04-CA

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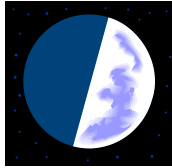
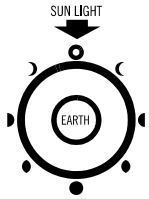
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Note: Web sites referenced in this lesson were valid at time of publication.

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EARTH SCIENCE – GRADE 5 – CATHOLIC

LESSON TITLE: The Phases of the Moon & The Seasons of the Church Year

GENERAL CONCEPT: PHASES AND SEASONS

SCIENCE LESSON CONCEPT

- Phases of the moon
- Moon's light
- Pattern of the phases

GOAL OF SCIENCE LESSON

- Students will learn the many phases of the moon as they relate to the position of the sun and the earth.
- Students will be able to identify and document the phases during a 30 day cycle.

RELIGION LESSON CONCEPT

- The Seasons of the Church year
- Pattern of the seasons

GOAL OF RELIGION LESSON

- Students will learn the many seasons of the liturgical calendar and how they relate to us.
- Students will be able to identify and document these seasons during the liturgical year.

OUTCOME EXPECTED

- Students will explain the moon phases as they relate to the position of the earth and the sun.
- Students will record the phases of the moon over a 30 day cycle.

MATERIALS NEEDED

- Science Journal page: Phases of the Moon
- Pen or pencil
- Three signs: Sun, Moon, Earth
- Blank monthly calendar
- Night sky/day sky
- Farmer's Almanac
- Calendar with moon phases shown

SCIENCE METHODOLOGY

- **GIVE** the three signs to three students.
- **TELL** them you want them to demonstrate the movement of the earth around the sun and the moon around the earth.
- **ALLOW** enough space for the students to move.

OUTCOME EXPECTED

- Students will identify the seasons of the liturgical year.
- Students will explain what each season encompasses.

MATERIALS NEEDED

- Religion Notebook/Journal
- Pen or pencil
- Either desk copies of the liturgical calendar (1 per student) or a classroom sized copy of the liturgical calendar.

RELIGION METHODOLOGY

- **IDENTIFY** the seasons of the Liturgical Year: Advent, Christmastide, Ordinary Time, Lent, and Eastertide.
- **SAY:** Just as we saw the moon in different phases and we experience the year in different seasons, the church year has different phases or seasons. We call the church year the Liturgical Year.

- **THIS REVIEW** will help them recall previously learned material.
- **IDENTIFY** the term: moon phases.
- **SAY:** There are eight phases of the moon. That means that we see only parts of the moon during the month. The phases relate to the position of the moon on its orbit around the earth. This results in varying amounts of sunlight being reflected by the moon. The moon has no light of its own.
- **SHOW and NAME** the eight phases of the moon. Including the terms “waxing” and “waning” moon.
- **HAVE** the students illustrate and label the phases of the moon on the Science Journal page.
- **SAY** the moon has a 28 day cycle. According to the pattern of the cycle, you can predict the phase of the moon on a particular day.
- **GIVE** the students the monthly blank calendar.
- **SAY:** You are going to observe and record what the moon looks like every night for 30 days. You are going to draw the shape you see each night. You should label it with the correct name of its phase.
- **HAVE** the students identify the pattern for 30 days and bring their monthly calendar in regularly for checks.
- **AT THE END OF THE 30 DAYS**, have the students
- **HAVE** the students write the term Liturgical Year in the Religion notebook.
- **SAY:** The Church year begins with Advent.
- **HAVE** the students look at the copy of the Liturgical Year wheel and find Advent.
- **ASK:** What do you know about Advent? (four weeks before Christmas, preparing hearts for Jesus’ birth, purple color, Advent wreath, 3 purple candles, 1 rose candle, Jesse Tree)
- **HAVE** the students record some words or drawings about the Advent Season in the Religion notebook
- **SAY:** The next season is Christmastide. Notice that I didn’t say Christmas. For most of us the word Christmas means just one day, December 25.
- **HAVE** the students find the Christmastide season on the Liturgical Calendar.
- **ASK:** How long is Christmastide? What color? What would you expect to see in church during this time? What songs? What color vestments? Any symbols? (White, manger scene, evergreen trees, wreaths, Christmas carols)
- **HAVE** the students record some words or drawings about Christmastide in their Religion notebook.
- **SAY:** The Church knows that we need a period of

identify the patterns and the length of each phase.

- **GIVE** them the date of the next New Moon.
- **HAVE** them predict the phase of the moon on a particular day of the month.
- **HAVE** the students record their prediction on the Science Journal page.
- **HAVE** the students bring in their prediction and the phase they observed that date.
- **DISCUSS** why their prediction was successful or not.
- **SHOW** a copy of the farmer's almanac which has all the moon phases.
- **DISCUSS** how farmers used and some still use the moon phases to decide when to plant a certain crop.
- **SHOW** the students the calendar with the moon phases shown.
- **POSIT:** The moon is visible because it reflects light from the sun. The shape we see is caused by the position of the moon on its orbit around the earth.

NOTE: If certain conditions (clouds, rain) make it impossible for the students to view the moon for the entire time, please have the students use the internet or weather report (TV or newspaper) to complete the assignment.

ordinary activity after celebrating Christmastide. The Church gives us Ordinary Time so that we can maintain an even pace of prayer and worship.

- **HAVE** the students locate Ordinary Time between Christmastide and Lent on the Liturgical Calendar.
- **ASK:** How long is it this year?
- **ASK:** What color would you expect to see in Church? (green) What about decorations and flowers? (a minimal amount)
- **SAY:** Ordinary Time in church is just like a non-holiday time at your home. Everything still looks attractive, but no special decorations. Just ordinary things.
- **HAVE** the students record or draw some information about Ordinary Time in the Religion notebook.
- **ASK:** What season comes after this Ordinary Time season? (Lent)
- **HAVE** the students locate Lent on the Liturgical Year chart.
- **ASK:** What day is the beginning of Lent? (Ash Wednesday)
- **ASK:** What do you remember about that day?
- **ASK:** How long is the Lenten Season?

- **ASK:** What color symbolizes the Lenten Season? (purple)
- **ASK:** How would you expect the church to look during Lent?
- **ASK:** What do we do during Lent? (abstain, do penance, do more praying)
- **HAVE** the students write or illustrate words about the Lenten Season.
- **SAY:** The Easter Season is the most important and festive season in the Church.
- **ASK:** Why would the Easter Season be the most important? (Jesus rose from the dead, without the resurrection there is no salvation)
- **ASK:** What is the festive color of the Church? (white)
- **ASK:** When does the Easter Season begin and when does it end? (Easter vigil celebration of Easter and Easter Sunday to Pentecost Sunday)
- **ASK:** What are some symbols of the Easter Season? (Lily, Easter eggs (new life), cross)
- **HAVE** the students locate the Easter Season on the Liturgical Calendar.
- **ASK:** One of the seasons repeats. Which one is that? (Ordinary Time)

- **HAVE** the students locate the large Ordinary Time section on the Liturgical Year chart.
- **ASK:** What color? (green) How many weeks? (varies from year to year depending on the date of Easter)
- **ASK:** Why is having a variety of seasons helpful for us to be faithful to God? (isn't boring, requires different attitudes and practices, attracts us with different colors and decorations)
- **HAVE** the students color code a regular yearly calendar with the Liturgical colors for the current year.
- **HAVE** the students write a reflection (10-15 sentences) on their favorite liturgical season.
- **HAVE** the students share their reflections with the class.
- **POSIT:** The Church Year begins with Advent and ends at the conclusion of Ordinary Time with the Feast of Christ the King.

SCIENCE LINKS

www.internet4classrooms.com/skills_6th_science.htm

[6th Grade Science Standards \(Prior\)](#) Links to help Sixth **Grade** students meet state **science** standards. ... Earth, and **moon** explains lunar and solar eclipses, as well as the defined **moon phases**. ...Can be upgraded to current standards. Has good links for other info and activities.

www.harcourtschool.com/menus/science/grade5_nl.html

[Harcourt Science](#) See Chapter 12 &13 for good on-line and black line materials for students on moon phases.

http://www.moonconnection.com/moon_phases.phtml

Moon Phases / Lunar Phases Explained

An explanation of the moon phases using a colorful diagram with realistic images .

<http://home.hiwaay.net/~krcool/Astro/moon/moonphase>

Moon and Earth Phase Viewer

The four major moon phases are "New" , "1st Quarter" , "Full" and "Last or 3rd Quarter". These phases have to do with the relative positions of the sun, the moon ...

RELIGION LINKS

www.associatedcontent.com/...catholic_liturgical.html

[e Printable Catholic Liturgical Calendars and Activities](#) [Sep 2, 2010] And here is the **Catholic Church liturgical calendar for 2012**. Be sure to visit the link at the beginning of this paragraph **for** other online and web versions of the Roman ...

KEY WORDS

- MOON PHASE
- ORBIT
- CYCLE
- NEW MOON
- FULL MOON
- QUARTER MOON
- HALF MOON
- THREE QUARTER MOON
- WAXING MOON
- WANING MOON

KEY WORDS

- SEASONS
- LITURGICAL YEAR
- ADVENT
- CHRISTMASTIDE
- ORDINARY TIME
- LENT
- EASTERTIDE
- ASH WEDNESDAY
- HOLY WEEK
- FASTING AND ABSTINENCE
- PENANCE