Grade Level: **Kindergarten**

**Title:**
The Sun seems to move across the sky & we can turn toward God

**Denomination:** Catholic

**Lesson ID:** ES-GK-01-CA

**Contact Info:**
Exploring the World, Discovering God (EWDG)
Institute for Theological Encounter with Science & Technology (ITEST)
20 Archbishop May Drive, Suite 3400A
St. Louis, MO 63119
EWDG email: EWDG-Info@creationlens.org
EWDG web site: www.creationlens.org
ITEST web site: www.faithscience.org
Ph: 314.792.7220

**Note:** Web sites referenced in this lesson were valid at time of publication.
EARTH SCIENCE MODULES – KINDERGARTEN - CATHOLIC
LESSON 1 - The Sun seems to move across the sky and we can turn toward God.

GENERAL CONCEPT: The position of the sun in the sky appears to change during the day.

SCIENCE LESSON CONCEPT
The sun seems to move from East to West during the day.

GOAL OF SCIENCE LESSON
Student will know that the position of the sun appears to change during the day.

OUTCOME EXPECTED
Student will know the sun seems to rise in the east and seems to set in the west.

MATERIALS NEEDED
• Picture of the sun
• Background mural of sky and earth, house, and tree
• Sign: EAST

RELIGION LESSON CONCEPT
When we pray at Mass, we are turning toward God. When we play around at Mass, we are turning away from God.

GOAL OF RELIGION LESSON
Student will begin to learn how to participate at Mass.

OUTCOME EXPECTED
Student will exhibit better Church behaviors.

MATERIALS NEEDED
• Visit to Church with tour of sanctuary, altar, and sacristy
• Identification of sanctuary items: altar, tabernacle, candles, lectern, altar cloth, presider’s chair, lectionary (Bible readings), crucifix
• Sign: WEST
• Sign: DAWN
• Sign: NOON
• Sign: SUNSET
• Model of solar system
• Globe
• Science Journal Page: THE SUN
• Shadow outlines of house and tree on mural
• Poster putty to stick on shadow outlines
• Pencil
• Crayons

NOTE: The Smartboard may be used in place of the mural.

SCIENCE METHODOLOGY
It is critical that the student actively participates in the exercise and not just the teacher demonstrating the position of the sun.
• DEMONSTRATE how the sun seems to move during the day.

• Identification of vestments: Alb (long, white, robe like a Baptismal garment), stole (it is like a policeman’s badge. It says the priest is on duty), Chasuble (Chaz, you, ble) - outer vestment like a cape.

• Identification of sacristy items: Chalice, paten (plate), finger bowl, finger towel, hosts, wine, Sacramentary (Book with the words and actions of the priest).

• Identification of Church items: holy water fonts at doors, Baptismal font or pool, pews, aisles, Stations of the Cross, statues, stained glass windows, choir and music area and instruments.

• Globe that spins
• Cardboard SUN
• Drawing paper
• Crayons

RELIGION METHODOLOGY
• VISIT the church and take a tour. Be sure you can get in to all the areas. Ask the priest, deacon, Director or Coordinator of Religious Education to lead the tour. Be sure the tour leader knows what is on your list to identify. This activity is crucial.
• **AFTER** the tour, have the student draw a picture of the church.
• **USE** the mural to show how light first comes at **DAWN** when the sun rises about the skyline in the **EAST**. Show how the shadow of the house and the tree will be away from the sun.
• **STICK** the shadows to the house and tree to show **sunrise**.
• **REMOVE** the **DAWN** shadows from house and tree.
• **MOVE** the sun across the mural until it is directly above the house and tree. **EXPLAIN** that there is no shadow since the sun is directly above at noon.
• **MOVE** the sun toward the **WEST** and show how the shadows will now be on the other side of the house and tree.
• **STICK** the shadows on the east side of the house and tree.
• **SAY:** At **SUNSET** the sun seems to slip below the skyline and the earth gets dark.
• **REMOVE** the shadows and the sun.
• **ASK:** Does the sun really move? Why? Why not?
• **USE** the solar model to briefly show the student that the sun doesn’t move around the earth.

• **SAY:** Since Church is such a special place: God’s House, what do we do when we are there on Sunday for Mass? (Pray, sing, sit, stand, kneel, pay attention)
• **SAY:** Did you know that when you pray at Mass you are turning toward God? Remember how the earth turned toward the sun and received the light from the sun? We get God’s light when we pray.
• **ASK:** When Father says: “The Lord be with you”, what do you say? (And also with you.)
• **ASK:** Do you make the Sign of the Cross with holy water when you come in the Church? Doing those things is turning toward God.
• **ASK:** If you play around, talk, eat Cheerios or play with your doll or trucks during Mass, did you know that you are turning away from God like the earth is turned away from the sun at night time?
• **USE** the cardboard sun and globe to emphasize: toward the sun = praying and behaving = turning toward God. Also tell them: away from the sun = playing around = turning away from God. Be as positive as possible in encouraging turning toward God.
• **HAVE** the students draw a picture of how they are going to act at Mass.
• **USE** the globe to show that we turn on the north and south poles and we face toward (daylight) and away (night) from the sun.

• **HAVE** the students draw the mural scene on the Science Journal Page.

  **POSIT:** The sun seems to move from east to west during the day.

**ADDITIONAL ACTIVITY SUGGESTIONS**

~ Draw their shadow in the morning and in the afternoon

~ Students find the sun first thing in the morning, when the lesson is being taught, and last thing in the afternoon.

~ This lesson may complement your reading curriculum.

• **POSIT:** When we pray, we are turning to God.

**ADDITIONAL SUGGESTIONS**

~ If your parish has the Catechesis of the Good Shepherd and makes use of the Atrium, this lesson will enhance that learning. You can find out more about Catechesis of the Good Shepherd at [http://www.cgsusa.org/](http://www.cgsusa.org/)
RESOURCES, LINKS AND COMPUTER LESSONS

Science Links

(Teacher) Lesson Plan and Activities for teaching the four Cardinal Directions.  
http://www.lessonplanspage.com/SSArtEdiblePhysicalAndDirectionalStateGeography25.htm

Religious Links

(Teacher): Sadlier site  
www.webbelieveweb.net

(Teacher) Two sets of coloring pages of creation for teacher to print and copy.  
http://www.coloring.ws/creation.htm

(Teacher) A mini-book on creation for teacher to copy templates and then print for student. Includes clear direction for assembly.  
KEY WORDS
EARTH SCIENCE – LESSON 1 – KINDERGARTEN - CA

SUN  MASS
EAST  PRAY
WEST  ANSWER
NORTH  SING
SOUTH  BEHAVE
POSITION  SANCTUARY
KEY WORDS
EARTH SCIENCE – LESSON 1 – KINDERGARTEN - CA

SUN
EAST
WEST
NORTH
SOUTH
POSITION

MASS
PRAY
ANSWER
SING
BEHAVE
SANCTUARY

W-KEY-ES-01-CA