



Grade Level: Grade 2

Title:

Sorting Rocks & God is my ROCK

Denomination: Catholic

Lesson ID: ES-G2-02-CA

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

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EARTH SCIENCE – GRADE TWO - CATHOLIC LESSON 2: Sorting Rocks & God is My Rock

GENERAL CONCEPT: What are rocks like?

SCIENCE LESSON CONCEPT

Rocks may be classified by size, shape, color and texture.

GOAL OF SCIENCE LESSON

OPTION 1: Student will be able to group rocks in different ways.

OPTION 2: Student will be able to group rocks in a more difficult manner: single content or composite content; sedimentary, igneous, and metamorphic

OUTCOME EXPECTED

OPTION 1: Student will be able to describe two kinds of rocks using the properties of size, shape, color and texture.

MATERIALS NEEDED

RELIGION LESSON CONCEPT

God is my ROCK on whom I can depend no matter what!

GOAL OF RELIGION LESSON

Student will create a prayer rock to remind them that God is their rock.

OUTCOME EXPECTED

Student will develop a stronger relationship with God.

Student will see Jesus as the strong shepherd who can be relied on for help, love, and protection.

OPTION 2: Student will be able to classify rocks according to sedimentary, igneous, or metamorphic .

MATERIALS NEEDED

OPTION ONE:

- Group of rocks of different sizes
- Group of rocks of different shapes
- Group of rocks of different colors
- Group of rocks of different textures.

OPTION TWO:

- Rock specimens of sedimentary, igneous, and metamorphic rocks for 4/5 stations of students

BOTH OPTIONS:

- Science Journal Page: GROUPS OF ROCKS
- Cardboard signs: Station 1, 2,3,4,

OPTION 1:

- Cardboard sign: SIZE, SHAPE, COLOR,TEXTURE

OPTION 2:

- Cardboard sign: SINGLE CONTENT, COMPOSITE CONTENT, SEDIMENTARY ROCK, IGNEOUS ROCK, METAMORPHIC ROCK

MATERIALS NEEDED

- One child's palm sized rock per student
- Fabric scraps
- Acrylic, enamel permanent paints
- Yarn
- Glue
- Copy of Psalm 18 or Psalm 62 verse about God is my rock. See links.
- Copy of Psalm 23 for children. See links.
- Small cardboard, stiff paper, or wood shepherd's staffs about 3 inches high for student to glue to decorated rock. One per student.
- Copies of Prayer Rock Poem – See last pages

- Pictures of each kind of rock listed above. Have one copy for each station.

SCIENCE METHODOLOGY

OPTION 1:

- **DIVIDE** the class into 4 groups.
- **SAY:** Each station has a group of rocks. I want you to put the rocks into groups. Each station will tell you what kind of group you should make.
- **REMEMBER** that size is small-medium-large.
- **REMEMBER** that shape is round, square, rectangle, triangle.
- **REMEMBER** that color means colors like: red, white, black, yellow.
- **REMEMBER** that texture means smooth, rougher and roughest.
- **SAY:** Group 1 you go to Station 1; Group 2-Station 2, etc.
- **NOW** go to your station and begin working. I will give

RELIGION METHODOLOGY

- **ASK:** What can God do for you? What has God done for you?
- **READ** the psalm verse in 18 or 62 about God is my rock.
- **ASK:** How is God like a Rock?
- **ASK:** What do you need a rock for?
- **DISCUSS** all the uses for a rock: anchor papers, defend yourself, foundation of a house; is solid, can't be moved.
- **EXPLAIN** the prayer rock project. Design and decorate a prayer rock to remind you to pray. It can be some place at home. If it is small, it can be in your pocket.
- **PUT OUT** the materials. Let the student work. Give time to decorate their prayer rock.
- **AFTER** the rocks are finished, give each student a copy of Psalm 23 and read it together.

- you a signal when your time is almost up. Someone from your group will explain your grouping to the class.
- **AT THE STOP SIGNAL**, a member of the group gives the report. Then the group mixes up the rocks again before moving to the next station.
- **REPEAT** for three more stations.
- **ASK:** Why would we classify rocks? What good would it do? Help find minerals, plan a garden or patio.
- **ASK:** Could someone take one rock and tell its size, shape, color and texture. Allow a few students to try.
- **STUDENT** should have the Science Journal Page.
- **EACH** student takes a rock, sits down and writes a size, shape, color, and texture report on the Science Journal Page.

OPTION 2 – SCIENCE METHODOLOGY

- **DIVIDE** the class into 4/5 groups.
- **SAY:** I am going to assign each of you to a particular station. You will be working as a group at each station. Each station has a group of rocks. When I give the signal, I want you to quietly walk to your assigned station and sit down. Do not touch anything on the desk. You will need your Science Journal and a pencil. Get those now.

- **ASK:** Why is Jesus so loving to us? (He cares for us –each person has all His love. He is a good shepherd who takes care of the sheep. We are the sheep.
- **ASK:** How can you follow the Good Shepherd? (Try to lead students to very concrete examples. Avoid words like Be KIND, Be NICE.)
- **SAY:** I am going to give each of you a shepherd's staff to remind you of Jesus, your Shepherd. Please glue it to your rock.
- **ALLOW** time for this activity.
- **SAY:** There is a fun poem about how we can use a Prayer Rock. Here is a copy. Let's read it.
- **TEACHER READS** the poem the first time.
- **HAVE** the students read the poem aloud and emphasize the capitalized words.
- **SEND** home the copy of the Poem with the prayer rock.
- **ASK:** Who would like to tell something about their prayer rock? Allow some time for sharing.
- **ASK:** Where will you put our prayer rock to remind you to pray to God? When will you pray?
- **POSIT** – God is our rock. He is always with us. All you have to do is to hold on to Him to be safe.

- **WHEN** all the students have the Science Journal and the pencil, have the students move to their stations.
- **SHOW** the first Key Word: SEDIMENTARY.
- **DEFINE** sedimentary. Be sure the student understands the term.
- **SHOW** a large picture of a sedimentary rock. If possible, give each station a copy of the picture or have the picture posted so that all groups can use it for identification. The Science Textbook may have some pictures of the various kinds of rocks.
- **SHOW** the second Key Word: IGNEOUS.
- **DEFINE** igneous. Be sure the student understands the term.
- **SHOW** a large pictures of an igneous rock. If possible give each station a copy of the picture or have the picture posted so that all groups can use it for identification.
- **SHOW** the third Key Word METAMORPHIC.
- **DEFINE** metamorphic. Be sure the student understands the term.
- **SHOW** a large picture of a metamorphic rock. If possible, give each station a copy of the picture or have the picture posted so that all groups can use it for identification.

- **TELL** the students to examine the rocks at their station. Give them time to look at all the specimens.
- **HAVE** the students classify the rocks according to sedimentary, igneous, and metamorphic. They should place the rocks in groups.
- **HAVE** one student in each group be the secretary and another student be the reporter.
- **DISCUSS** the groups of rocks with each group reporting and placing their groups of rock on a common table.
- **AFTER** all the groups have reported and placed their rocks on a common table, gather the students and have them examine each group.
- **ASK:** Are all the rocks in this group sedimentary? Why? If not, where does a particular rock belong.?
- **REGROUP** the rocks.
- **HAVE** the students go back to their stations and draw a sample of each kind of rock in their Science Journal. They should label each drawing. Spelling is important.

OPTION ONE: **POSIT-** We can classify rocks by size, shape, color and texture.

OPTION TWO: **POSIT –** We can classify rocks by type of rock: Sedimentary, Igneous, or Metamorphic.

RESOURCES, LINKS AND COMPUTER LESSONS.

Science Links

(Teacher) Lesson plan on rocks and their uses.

<http://www.coaleducation.org/lessons/wim/20.htm>

(Teacher) 4 different lesson plans on classification of various kinds of rocks. Click on site, then scroll down to Grade 2 Lesson Plans.

<http://geologyonline.museum.state.il.us/tools/lessons/>

(Student with Parental Guidance) Links to other Rock Hound interests such as fossils.

<http://www.rockhoundkids.com/rh-article-4.html>

(Student and Teacher) Pictures of students in a rock classification project.

http://www.educ.drake.edu/gerlovich/EDUC%20125,%20225/sci_ed/elem_sci/earth/Rocks%20and%20Minerals/pictures.htm

(Teacher and Student) Animations of how rocks were formed.

<http://www.fi.edu/fellows/fellow1/oct98/create/index.html>

(Teacher) Free pictures of various kinds of rocks. Click on picture to enlarge a bit. Use search on page to find Igneous rock picture, and Metamorphic rock picture

http://www.encyclopedia.com/topic/sedimentary_rock.aspx

(Teacher) Good quality FREE pictures to enlarge and copy and print. Use search to get pictures all rocks mentioned in this lesson.

<http://www.fotosearch.com/UNZ510/u11562928/>

Religious Link

(Teacher) – Copy of Psalm 18 to print.

<http://www.biblegateway.com/passage/?search=psalm%2018&version=31>

(Teacher) – Copy of Psalm 62 to print.

<http://www.biblegateway.com/passage/?search=psalm%2062&version=31>

(Student) –Copy of Prayer Rock Poem – See next page.

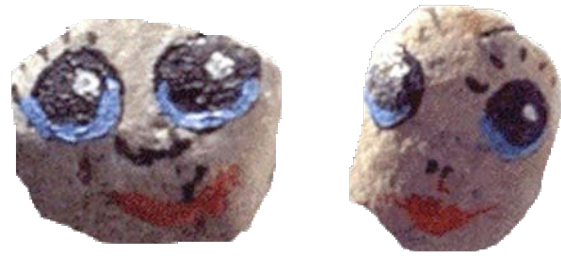
<http://www.deziningwebz.com/goldsberry/prayerrock.htm>

(Teacher) Copy of Psalm 23 with Jesus the Good Shepherd

<http://www.apples4theteacher.com/childrens-prayers/psalm-23/>

(Teacher) Kid-friendly version of Psalm 23

<http://www.essex1.com/people/paul/psalm23.html>



Prayer Rock

I'm your little prayer rock and this is what I'll do.

Just put me on your pillow till the day is through.

Then turn back the covers and climb into your bed.

And WHACK! Your little prayer rock will hit you on the head.

Then you will remember as the day is through, to kneel and say
your prayers as you wanted to.

Then when you are finished, just dump me on the floor.

I'll stay there through the night to give you help once more.

When you get up the next morning, CLUNK! I'll stub your toe.

So you will remember your morning prayers before you go.

Put me back upon your pillow when your bed is made.

And your clever little prayer rock will continue in your aid.

Because your Heavenly Father cares and loves you so.

He wants you to remember to talk to him, you know.

KEY WORDS
EARTH SCIENCE – GRADE TWO – LESSON 2 - CA



ROCKS
CLASSIFY
METAMORPHIC
IGNEOUS
SEDIMENTARY
SIZE
SHAPE
COLOR



BIBLE
FOUNDATION
STRONG SHEPHERD
PRAYER ROCK
DEPEND

KEY WORDS
EARTH SCIENCE – GRADE TWO – LESSON 2 - CA



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