



# Creation Lens

*Exploring the World, Discovering God*

*Grade Level: Grade 7*

*Title:*

## **Plasticity & The Two Natures of Jesus**

*Denomination: Catholic*

*Lesson ID: ES-G7-01-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 7 – CATHOLIC  
LESSON TITLE: Plasticity & The Two Natures of Jesus**

**GENERAL CONCEPT: The nature of things.**

**SCIENCE LESSON CONCEPT**

- Plasticity in the layers of the Earth

**GOAL OF SCIENCE LESSON**

- Students will explore the nature of the mantle's property of plasticity.

**OUTCOME EXPECTED**

- Students will observe what it means for a substance to behave as both a solid and a liquid.

**RELIGION LESSON CONCEPT**

- Divine and human natures of Jesus

**GOAL OF RELIGION LESSON**

- Students will explore how Jesus is both human and divine.

**OUTCOME EXPECTED**

- Students will add to their understanding of how Jesus is both human and divine.

## MATERIALS NEEDED

- Science Journal page: Plasticity
- Pen or pencil
- Corn starch – enough for each student to have 2 parts corn starch to 1 part water
- Water
- Bowl-like containers for each student
- Newspaper and plastic to cover the work area thoroughly

## SCIENCE METHODOLOGY

- **HAVE** the students mix together 2 parts corn starch to 1 part water.
- **HAVE** the students observe their “goo” to see if it
  - ~ pours like a liquid;
  - ~can be rolled into a ball like a solid;
  - ~is a solid when under great force;
  - ~is a liquid when it is left alone.
- **HAVE** the students record the experiment on the Science Journal page.
- **ASK:** What do you think will happen if you punch your fist into the “goo”?

## MATERIALS NEEDED

- Religion Notebook
- Pen or pencil
- Bible
- Writing paper

## RELIGION METHODOLOGY

- **SAY:** Jesus is the second person of the Blessed Trinity so He is divine. Jesus is also the son of Mary and so He is human. He received His humanity from His mother and His Divinity from God the Father.
- **HAVE** the students brainstorm the human things about Jesus. (birth, obedient to parents, ate, walked, death, showed compassion, cried at the death of Lazarus) They can use the bible for ideas.
- **RECORD** the human things about Jesus on the board and in the Religion notebook.
- **HAVE** the students brainstorm the divine things about Jesus. (creation – The Gospel of John 1, redeemer, cures, miracles, resurrection)

- **HAVE** the students make a hypothesis about punching their fist into the “goo”.
- **HAVE** the students write their hypothesis on the Science Journal page.
- **HAVE** the students punch their fist into the bowl of “goo”.
- **ASK:** What are your results?
- **COMPARE** the students’ results. (fist will not go into the “goo”)
- **HAVE** them record if their hypothesis was correct or not.
- **ASK:** What do you think will happen if you gently put your hand in the “goo”?
- **RECORD** their hypothesis on Science Journal page.
- **HAVE** the students gently rest their hand on the “goo” and observe and record the results on the Science Journal page.
- **ASK:** What are your results?
- **COMPARE** the students’ results. (hand will sink into the “goo”)
- **HAVE** them record if their hypothesis was correct or not.
- **HAVE** the students share their observations. (observations - the “goo” acts like a solid and a liquid)

- **SAY:** Jesus is both fully human and fully divine. This reminds me of the science lesson on plasticity which allows the Earth’s mantle to be both a solid and liquid at the same time. It isn’t a perfect example, but there is really nothing on earth or in our human experience which we can use to explain the two natures of Jesus.
- **HAVE** the students write an essay in which they cite at least two examples with Scripture quotes to show that Jesus was truly human and divine.
- **POSIT:** Jesus has two natures: human and Divine which are part of Him at all times.

- **TELL** the students they have demonstrated “plasticity”.
- **HAVE** the students write the term plasticity on the Science Journal page and write a definition for it.
- **SAY:** The Earth’s mantle shows plasticity. It is solid enough to support the Earth’s crust above (so it doesn’t sink in). It is liquid enough to allow crust and continents to move (plate tectonics).
- **HAVE** the students write the explanation of plasticity of the Earth’s mantle on the Science Journal page.
- **POSIT:** The plasticity of the Earth’s mantle allows it to operate as a solid and as a liquid.

## SCIENCE LINKS

[www.central.brevard.k12.fl.us/teachers/webb/Plasticity](http://www.central.brevard.k12.fl.us/teachers/webb/Plasticity)

Plasticity Lab – Central Middle School. Simulating Plasticity Lab  
. Problem: Can the plasticity of Earth's mantle be simulated?  
Objective: describe the rate at which tectonic plates move.  
Gives detailed instructions for experiment.

[http://mail.colonial.net/~hkaiter.Layers\\_of\\_the\\_Earth.html](http://mail.colonial.net/~hkaiter.Layers_of_the_Earth.html)

Layers of the Earth. Oobleck simulates Plasticity in the Mantle.  
Under conditions of High Temperature...Magnetic Pole – the  
Place where Earth's magnetic Field lines converge. Great  
illustrations of layers of the earth; very colorful and good  
information. Students could view this site.

## RELIGION LINKS

<http://www.carm.org/jesus-two-natures>

Jesus' Two Natures: God and Man / Christian Apologetics  
and...They are separate yet act as a unit in the one person of  
Jesus. This is called the Hypostatic Union. The following chart  
clearly illustrates the two natures of Jesus. It is clear enough so  
that you could give it to the students.

## KEY WORDS

- SOLID
- LIQUID
- MANTLE
- CRUST
- PLATE TECTONICS
- PLASTICITY
- CORE
- MAGMA

## KEY WORDS

- HUMAN NATURE
- DIVINE NATURE
- ONE PERSON
- MYSTERY