



Grade Level: Grade 5

Title:

Magnetic Force & God: A Force Drawing Us

Denomination: Catholic

Lesson ID: PS-G5-02-CA

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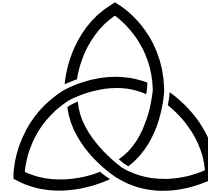
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Note: Web sites referenced in this lesson were valid at time of publication.

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PHYSICAL SCIENCE – GRADE 5 – CATHOLIC

LESSON TITLE: Magnetic Force & God: a Force Drawing Us

GENERAL CONCEPT: Push/Pull Forces

SCIENCE LESSON CONCEPT

- Kinds of forces: gravity, centrifugal, friction, magnetic, electrical

GOAL OF SCIENCE LESSON

- Students will understand and demonstrate magnetic force.

OUTCOME EXPECTED

- Students will observe that magnets will attract or repel depending on how you use them.

RELIGION LESSON CONCEPT

- God: a force drawing us
- Evil: a force drawing us

GOAL OF RELIGION LESSON

- Students will become aware of a pull or push toward good or bad behavior.
- Students will adopt the goal of choosing the good.

OUTCOME EXPECTED

- Students will become more aware of choice-making in their daily life.

MATERIALS NEEDED

- Science Journal page: Magnetic Force
- Pen or pencil
- Two magnets for each student/group
- Iron filings for each student/group
- Piece of paper for each student/group

SCIENCE METHODOLOGY

- **EXPLAIN** how the poles on a magnet attract and repel.
- **SHOW** the poles to the students.
- **HAVE** the students draw and label a magnet and its poles on the Science Journal page: Magnetic Force.
- **HAVE** the students manipulate the magnets.
- **SAY:** Place the two magnets under the piece of paper. Keep them some distance apart.
- **GIVE** each group some iron filings.
- **SAY:** Sprinkle the iron filings on the paper and watch what happens.
- **ALLOW** some time for observation.

MATERIALS NEEDED

- Religion Notebook/Journal
- Pen or pencil
- Index cards with scenarios of good and bad behavior (prepared by teacher ahead of time)
- Board

RELIGION METHODOLOGY

- **EXPLAIN** that because God is our Creator and we are made in His own image and likeness, we are drawn to God like an object is drawn to a magnet.
- **REMIND** the students of their science experiment with magnets which had two poles. One attracted and the other repelled.
- **SAY:** Situations in our lives either pull us toward God or push us away from Him and toward something else.
- **ASK:** Can anyone give me some examples of this?
- **ALLOW** students to come up with events.
- **DISCUSS** a few of the scenarios which you have previously prepared and written on index cards. Those might be: Homework needs to be done and a friend calls us; Chores need to be done and we want to watch a

- **ASK:** What happened to the iron filings? (moved to the magnets)
- **ASK:** What does the movement of the iron filings show you about the force fields of the magnets?
- **ASK:** How would you explain magnetic force to someone else?
- **ACCEPT and RECORD** the student replies.
- **HAVE** the students write up their conclusions about magnetic force using the scientific method.

NOTE: This lesson presupposes that the Scientific Method has been taught previously and is regularly used. If not, you can teach it now.

- **POSIT:** Magnets have force fields in proportion to their strength.

movie; We are tired on Sunday morning and want to sleep; Someone has been teasing us; Texting a friend; Having a party; Spending time with your grandparents, etc; Note that not all the activities are good or bad in themselves. The “why” is the crucial factor in some of these scenarios.

- **CATEGORIZE** the scenarios into the two main headings on the board: TOWARD GOD -- AWAY FROM GOD.
- **HAVE** the students (either individually or by small groups) place the scenario cards on the board under the two categories.
- **AFTER** each placement, discuss why those scenarios belonged under those categories.
- **HAVE** the students reflect upon their personal tendencies toward God and away from God in their own lives. Give them some quiet time to do this.
- **HAVE** the students write about their reflections, tendencies and goals in their journals.
- **POSIT:** There will always be things that pull us to or push us away from God.

SCIENCE LINKS

www.uen.org/3-6interactives/science.shtml

[3-6 Student Interactives - Science - UEN](#) 3-6 Interactives - Fun, educational, online games geared towards third through sixth grade students.

RELIGION LINKS

www.faithfirst.com/html/kidsOnly/kidsOnly.html

[Kids Only Club for Grades 4 - 6](#) Kids' Clubhouse | KIDS ONLY Club | Teen Center. Faith First for Families | Catechists & Teachers . En Español | Catechetical Leaders & Religion Coordinators ...have students select GAMES and then select Choice and Consequence.

KEY WORDS

- FORCE
- MAGNETIC FORCE
- POLE
- ATTRACT
- REPEL
- PUSH
- PULL
- IRON FILINGS

KEY WORDS

- SITUATION
- INFLUENCE
- REFLECT
- GOAL
- CHOICE
- ATTRACTION