



Grade Level: Grade 3

Title:

Energy Can Move Matter & Eucharist is Our Energy

Denomination: Catholic

Lesson ID: PS-G3-01-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

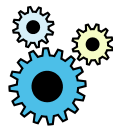
ITEST web site: www.faithscience.org

Ph: 314.792.7220

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

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PHYSICAL SCIENCE – GRADE THREE - CA

LESSON 1 – Energy Can Be Used to Move Matter and The Eucharist gives us Energy

GENERAL CONCEPT: Using energy to move matter.

SCIENCE LESSON CONCEPT

1. Energy is used to move matter.
2. Action causes reaction.

GOAL OF SCIENCE LESSON

Student will be able to demonstrate that matter can do greater work when put into action

OUTCOME EXPECTED

Student will desire to further explore chain reactions and the use of pulleys and levers.

MATERIALS NEEDED

- Dominoes
- Several paper fans

RELIGION LESSON CONCEPT

Our reception of God's Word and the Body and Blood of Jesus makes us fully alive human beings to give God glory and the energy to be all we can be to make the world better.

GOAL OF RELIGION LESSON

Student will know that we can make a difference when we let Jesus work in us.

OUTCOME EXPECTED

Student will have a greater desire for participation in the Mass.

MATERIALS NEEDED

- Bible: Unless you eat my Body and drink my Blood you shall not have life within you See last pages.

- Balloons
- Picture of billiard balls scattering or Indoor bowling pins and ball
- Science Journal Page: ENERGY CAN MOVE MATTER
- Pointer or a long stick

SCIENCE METHODOLOGY

The Student should do all parts of the experiment because the results should lead the student to the conclusion. Scientific Methodology requires that many variables be tested before a solid conclusion can be determined.

- **SET UP** the dominoes some distance from the student.
- **ASK:** Who can move the air enough to knock down the dominoes?
- **LET** several students try from their seats.
- **ASK:** Why didn't their efforts work?
- **PUT** some balloons on the floor some distance from the students.
- **LET** some students try to use air from their seats to move the balloons.
- **ASK:** What happened and why?

- Song: Just Like a Mustard Seed or similar song
- Bible: Pentecost Story – See last pages
- CD Player

RELIGION METHODOLOGY

- **READ** from the Bible the quote of Jesus about eating His Body and drinking His Blood.
- **ASK:** When do we receive Jesus' Body and Blood?
- **ASK:** Why do we receive Communion?
- **READ** the Pentecost Story from the Bible.
- **ASK:** What did the Holy Spirit give the Apostles so that they could go out and boldly preach the message of Jesus?
- **SAY:** We receive God's Word at Mass in the Readings and are told what we need to do and how to act. We receive Jesus in Holy Communion to help us act like Jesus. Just like the Apostles, we need the Holy Spirit to help us live bravely and spread the message of Love.

- **ASK:** When air blows on balloons what happens?
- **GIVE** a student in the front row a pointer or stick and see if the student can knock over the dominoes.
- **GIVE** several students paper fans and see how close they need to be to move the balloons on the floor.
- **SET UP** the indoor bowling pins or show the student the picture of the scattering pool balls.
- **ASK:** What caused the reaction? Energy caused the movement which caused the reaction.
- **HAVE** the student draw each cause and effect on the Science Journal Page: dominoes, balloon, bowling or pool balls.
- **POSIT:** Energy can move matter.

- **SAY:** The Holy Spirit is the energy that moves us just like wind movement uses energy to move balloons on the floor.
- **TEACH** the Holy Spirit prayer: Come, Holy Spirit, Fill the hearts of your faithful and we shall renew the face of the earth. Amen.

Inclusion of the song as part of the lesson is important because song is a part of praise of God.

- **SING:** The Mustard Seed Song or a similar song.
- **POSIT:** The Holy Spirit gives us the energy to follow Jesus.

RESOURCES, LINKS AND COMPUTER LESSONS.

Science Links

(Student) <http://www.brainpop.com/>

Student can watch videos and take quizzes. Teacher can have a 14 day free pass.

(Teacher) While this lesson lists Grade 2, it has many good experiments for wind and other energy types. Defines and gives activities for students to follow; assessments and rubrics.

<http://www.energyquest.ca.gov/projects/index.html#wind>

(Teacher) Wind and other science experiment and projects for K-12 listed and explained here. Click on wind projects then select particular project.

<http://www.energyquest.ca.gov/projects/index.html#wind>

(Teacher) Student devised Energy Dominoes Game and other parts of the lesson.

http://www.themosh.org/psd2002/athome/lesson_two.as

Religious Links

(Teacher and Parents) Ten Reasons Why NOT to go to Mass and ONE really good reason why you should.

http://uscatholic.claretians.org/site/News2?abbr=usc_&page=NewsArticle&id=11003

(Teacher and Parent) Taking Little Ones to Church

http://www.domestic-church.com/CONTENT.DCC/19980301/SCRMNTL/KIDS_MA_SS.HTM

John 6: 48-63

- I am the bread of life.
- 49 Your ancestors ate the manna in the desert, but they died;
- 50 this is the bread that comes down from heaven so that one may eat it and not die.
- 51 I am the living bread that came down from heaven; whoever eats this bread will live forever; and the bread that I will give is my flesh for the life of the world."
- 52 The Jews quarreled among themselves, saying, "How can this man give us (his) flesh to eat?"
- 53 Jesus said to them, "Amen, amen, I say to you, unless you eat the flesh of the Son of Man and drink his blood, you do not have life within you.
- 54 Whoever eats ¹⁹ my flesh and drinks my blood has eternal life, and I will raise him on the last day.
- 55 For my flesh is true food, and my blood is true drink.
- 56 Whoever eats my flesh and drinks my blood remains in me and I in him.
- 57 Just as the living Father sent me and I have life because of the Father, so also the one who feeds on me will have life because of me.
- 58 This is the bread that came down from heaven. Unlike your ancestors who ate and still died, whoever eats this bread will live forever."

59

These things he said while teaching in the synagogue in Capernaum.

60

²⁰ Then many of his disciples who were listening said, "This saying is hard; who can accept it?"

61

Since Jesus knew that his disciples were murmuring about this, he said to them, "Does this shock you?"

62

What if you were to see the Son of Man ascending to where he was before? ²¹

63

It is the spirit that gives life, while the flesh ²² is of no avail. The words I have spoken to you are spirit and life.

Acts 2: 1-42 The Pentecost Story

Acts

Chapter 2

1

¹ When the time for Pentecost was fulfilled, they were all in one place together.

2

And suddenly there came from the sky a noise like a strong driving wind, ² and it filled the entire house in which they were.

3

Then there appeared to them tongues as of fire, ³ which parted and came to rest on each one of them.

4
And they were all filled with the holy Spirit and began to speak in different tongues, ⁴ as the Spirit enabled them to proclaim.

5
Now there were devout Jews from every nation under heaven staying in Jerusalem.

6
At this sound, they gathered in a large crowd, but they were confused because each one heard them speaking in his own language.

7
They were astounded, and in amazement they asked, "Are not all these people who are speaking Galileans?"

8
Then how does each of us hear them in his own native language?

9
We are Parthians, Medes, and Elamites, inhabitants of Mesopotamia, Judea and Cappadocia, Pontus and Asia,

10
Phrygia and Pamphylia, Egypt and the districts of Libya near Cyrene, as well as travelers from Rome,

11
both Jews and converts to Judaism, Cretans and Arabs, yet we hear them speaking in our own tongues of the mighty acts of God."

12
They were all astounded and bewildered, and said to one another, "What does this mean?"

13
But others said, scoffing, "They have had too much new wine."

14 ⁵ Then Peter stood up with the Eleven, raised his voice, and proclaimed to them, "You who are Jews, indeed all of you staying in Jerusalem. Let this be known to you, and listen to my words.

15 These people are not drunk, as you suppose, for it is only nine o'clock in the morning.

16 No, this is what was spoken through the prophet Joel:

17 'It will come to pass in the last days,' God says, 'that I will pour out a portion of my spirit upon all flesh. Your sons and your daughters shall prophesy, your young men shall see visions, your old men shall dream dreams.

18 Indeed, upon my servants and my handmaids I will pour out a portion of my spirit in those days, and they shall prophesy.

19 And I will work wonders in the heavens above and signs on the earth below: blood, fire, and a cloud of smoke.

20 The sun shall be turned to darkness, and the moon to blood, before the coming of the great and splendid day of the Lord,

21 and it shall be that everyone shall be saved who calls on the name of the Lord.'

22 You who are Israelites, hear these words. Jesus the Nazorean was a man commended to you by God with mighty deeds, wonders, and signs, which God worked through him in your midst, as you yourselves know.

23 This man, delivered up by the set plan and foreknowledge of
God, you killed, using lawless men to crucify him.

24 But God raised him up, releasing him from the throes of
death, because it was impossible for him to be held by it.

25 For David says of him: 'I saw the Lord ever before me, with
him at my right hand I shall not be disturbed.

26 Therefore my heart has been glad and my tongue has
exulted; my flesh, too, will dwell in hope,

27 because you will not abandon my soul to the netherworld,
nor will you suffer your holy one to see corruption.

28 You have made known to me the paths of life; you will fill
me with joy in your presence.'

29 My brothers, one can confidently say to you about the
patriarch David that he died and was buried, and his tomb is
in our midst to this day.

30 But since he was a prophet and knew that God had sworn an
oath to him that he would set one of his descendants upon
his throne,

31 he foresaw and spoke of the resurrection of the Messiah,
that neither was he abandoned to the netherworld nor did his
flesh see corruption.

32 God raised this Jesus; of this we are all witnesses.

33 Exalted at the right hand of God, ⁶ he received the promise
of the holy Spirit from the Father and poured it forth, as you
(both) see and hear.

34 For David did not go up into heaven, but he himself said:
'The Lord said to my Lord, "Sit at my right hand

35 until I make your enemies your footstool.'"

36 Therefore let the whole house of Israel know for certain that
God has made him both Lord and Messiah, this Jesus whom
you crucified."

37 Now when they heard this, they were cut to the heart, and
they asked Peter and the other apostles, "What are we to do,
my brothers?"

38 Peter (said) to them, "Repent and be baptized, ⁷ every one of
you, in the name of Jesus Christ for the forgiveness of your
sins; and you will receive the gift of the holy Spirit.

39 For the promise is made to you and to your children and to
all those far off, whomever the Lord our God will call."

40 He testified with many other arguments, and was exhorting
them, "Save yourselves from this corrupt generation."

41 Those who accepted his message were baptized, and about
three thousand persons were added that day.

⁸ They devoted themselves to the teaching of the apostles and to the communal life, to the breaking of the bread and to the prayer

KEY WORDS
PHYSICAL SCIENCE – GRADE THREE- LESSON 1 - CA

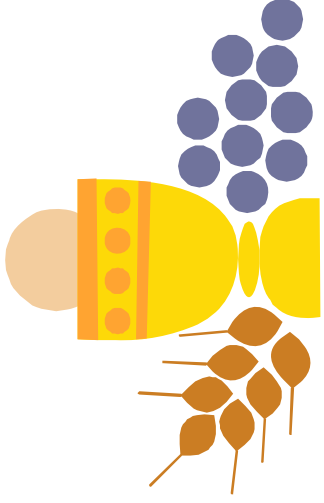


ENERGY
MATTER
ACTION
REACTION
CHAIN REACTION
WIND
PUSH



JESUS
COMMUNION
WORD OF GOD
BODY OF JESUS
BLOOD OF JESUS
JOHN 6: 48-65
ACTS 2:1-42

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