

Grade Level: Grade 4

Title:

Energy from the Sun & Eucharist Gives Energy

Denomination: Catholic

Lesson ID: PS-G4-01-CA

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

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PHYSICAL SCIENCE - GRADE 4 - CATHOLIC
LESSON 1 – Energy to Sustain Life: Physically and Spiritually

CONCEPT: Ecosystems need energy from the sun to sustain life and we need energy from the Eucharist to sustain spiritual life.

SCIENCE CONCEPT

Energy from the sun is used by an ecosystem to sustain life

GOAL OF SCIENCE LESSON

Student will know that energy from the sun affects growth and life.

OUTCOME EXPECTED

Student can explain that the sun provides energy to an ecosystem.

MATERIALS NEEDED

OPTION ONE; AQUARIUM

- Aquarium for fish
- Water

RELIGION CONCEPT

The Eucharist gives us energy to sustain our spiritual life.

GOAL OF RELIGION LESSON

Student will know that the Eucharist is the source of our spiritual life.

OUTCOME EXPECTED

Student will want to receive the Holy Eucharist often to sustain their spiritual life.

MATERIALS NEEDED

- Eucharist Posters
- Blank poster or Flip Chart

- Sand and Gravel
- Marker
- Air pump and hose
- Filtering device
- Anti-chlorine drops
- Fish food
- Rocks for fish to hide
- Water heater
- Thermometer which can float
- Science Journal Page: ECOSYSTEM AND ENERGY
- Pen/pencil
- Fish
- Scissors
- Glue
- Magazines from which to cut pictures
- CD Player
- CD “Come to the Feast” or similar song

OPTION TWO: HAMSTER OR GERBIL

- Hamster/Gerbil cage
- Water and Food dispensers

- Woodchips/bedding
- House or hut
- Wheel
- Chew sticks
- Science Journal Page: ECOSYSTEMS AND ENERGY
- Pen/pencil
- Hamster or Gerbil

SCIENCE METHODOLOGY

- **SAY:** Today we are going to set up an ecosystem in our classroom and we want to be sure we have everything right so the animal that lives in it will be able to survive and grow.
- **ASK:** What does every living thing need? (Shelter, food, clothing (hot and cold moderators), air and water.

Choose either the fish or the hamster/gerbil.

- **ASK:** What does our animal need for shelter? (a hut, a rock to hide)
- **ASK:** What kind of food does it need?

RELIGION METHODOLOGY

- **ASK:** What does your body need to live? (Accept answers: food, clothing, shelter, water, air)
- **ASK:** What does your soul need to live?
 1. **FOOD:** Eucharist and prayer
 2. **SHELTER:** God's protection and grace
 3. **WATER:** Refreshed in Baptism and prayer
 4. **CLOTHING:** Clothed with many gifts to follow God.
 5. **AIR:** We receive the breath of the Holy Spirit.
- **MAKE** a poster divided into BODY – SOUL

- **CLOTHING?** (HEAT AND COLD moderators);
Temperature of air, water.
- **AIR?**
- **WATER?**
- **ASK:** How will we provide good care for our animal?
- **DISCUSS** the responsibility of owning an animal and decide on a rotating basis how the class members will provide the suitable ecosystem.
- **POSIT:** All creatures need suitable ecosystems with energy provided from the sun.

- **PLAY** the song “Come to the Feast” or a similar song
- **HAVE** the students cut out pictures which illustrate what each half of the poster needs to live.
- **DISCUSS** with the students how necessary each half of the poster is to have a happy life.
- **POSIT:** We need a good physical ecosystem and a good spiritual ecosystem to be truly happy.

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RESOURCES AND LINKS

Science Links

(Teacher) A Watershed game to play about Ecosystems
www.**bellmuseum.org**/distancelearning/watershed/watershed2.html

(Teacher) Getting started setting up your aquarium. It also has side blocks that you can click for other information: filters, food, etc.

http://youraquariumcenter.com/getting_started.html

(Students) Click on web-site then scroll down to Aquariums. You can take a virtual visit to about 5-6 aquariums.

<http://www.northvalley.net/kids/zoos.shtml>

(Student and Teacher) Care of Gerbils and Hamsters

<http://exoticpets.about.com/cs/gerbils/a/gerbilcare.htm>

Religious Links

(Teacher) Free Last Supper Coloring Page

<http://www.jesusandkidz.com/LastSupper/LastSupperColoringPage.htm>

Computer Lesson

Have the student use a graphic program to design an aquarium or a gerbil/hamster habitat. Design the food container located near the habitat and label it with the ingredients: Bread of Life, Body of Christ, Fruit of the Vine, Living Bread Come Down From Heaven.

**KEY WORDS –PHYSICAL SCIENCE – GRADE 4
LESSON 1 – CATHOLIC**



ENERGY

ECOSYSTEM

PHYSICAL LIFE

SHELTER

SURVIVAL



SON OF GOD

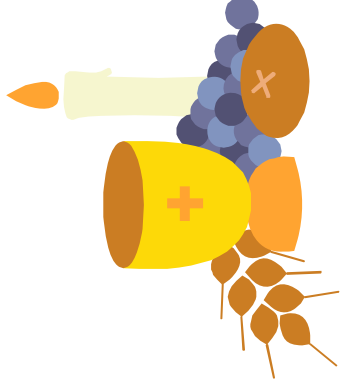
SPIRITUAL LIFE

NOURISHMENT

GROWTH

DEVELOP

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