



# Creation Lens

*Exploring the World, Discovering God*

*Grade Level: Grade 6*

*Title:*

## **Mold Growth Factors & Growth Factors of Seeds of Faith**

*Denomination: Catholic*

*Lesson ID: LS-G6-01-CA*

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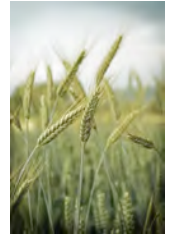
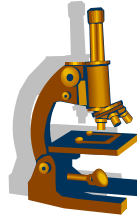
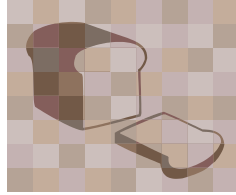
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## **LIFE SCIENCE – GRADE 6 - CATHOLIC**

### **LESSON TITLE: Mold Growth Factors & Growth Factors of Seeds of Faith**

**GENERAL CONCEPT: Growth**

#### **SCIENCE LESSON CONCEPT**

- Factors affecting mold growth

#### **GOAL OF SCIENCE LESSON**

- Students will see how mold grows under different circumstances.

#### **OUTCOME EXPECTED**

- Students will observe that mold will grow better in some conditions than in others.

#### **RELIGION LESSON CONCEPT**

- Seeds of faith
- Factors affecting growth of seeds of faith

#### **GOAL OF RELIGION LESSON**

- Students will understand what is meant by the Parable of the Sower and the Seed.
- Students will learn how to make spiritual fertile soil.

#### **OUTCOME EXPECTED**

- Students will observe what conditions are best for optimal growth of the seeds.

## MATERIALS NEEDED

- Science Journal page: Bacterial Growth
- Pen or pencil
- Three pieces of white bread
- Two zip lock bags
- Water
- Plate
- Access to a refrigerator

## SCIENCE METHODOLOGY

- **WRITE** “Mold” on the board.
- **DEFINE** the term mold and have students write the word and definition on the Science Journal page. (mold is a downy or furry growth on the surface of organic matter, caused by fungi, esp<sup>^</sup>^<sup>^</sup>^<sup>^</sup> in the presence of dampness or decay)
- **DEFINE** the term bacteria and have the students write the word and definition on the Science Journal page. (single-celled micro-organisms which can exist either as independent, free-living organisms or as parasites, dependent upon another organism for life)
- **SAY:** Today we are going to do an experiment in which

## MATERIALS NEEDED

- Three bean seeds
- Two paper towels
- Three zip lock bags
- Water
- Religion Notebook
- Copy of the Parable of the Sower and the Seed (Luke 8: 4-15)

## RELIGION METHODOLOGY

- **READ** Luke 8: 4-8.
- **SAY:** Jesus taught the people lessons of faith using parables or stories about real life that they would understand. The story of the Sower and the Seed taught them a lesson about faith.
- **ASK:** What lesson did Jesus intend them to learn?
- **RECORD** student replies.
- **READ** Luke 9-10.
- **ASK:** What didn’t the disciples understand?

factors or conditions will favor bacterial growth. We are going to vary the experiments by changing the light and air for each specimen.

- **HAVE** the students sprinkle the 1st piece of bread with water and place it in a zip lock bag. Close the bag tightly. Place the bag in a dark place.
- **HAVE** the students illustrate the first specimen on the Science Journal page and have them note the dark condition.
- **HAVE** the students sprinkle the 2<sup>nd</sup> piece of bread with water and place it in a zip lock bag and close the seal. Place this specimen near a window with plenty of light.
- **HAVE** the students illustrate this specimen on the Science Journal page.
- **HAVE** the students sprinkle the last piece of bread with water and leave it on a plate in the refrigerator.
- **HAVE** the students illustrate this third specimen on their Science Journal page.
- **HAVE** the students write a hypothesis on the Science Journal page on which specimen will grow the most mold and why?
- **CHECK** the three specimens daily for 3-5 days.
- **ON THE LAST DAY** see which specimen has grown the most mold. Why? Record on Science Journal page.

- **RECORD** student replies.
- **SAY:** We are going to do an experiment with seeds to see if we would have been able to tell the disciples what Jesus was trying to teach them.
- **HAVE** the students put one bean seed and a wet paper towel in a zip lock bag. Close the bag and tape it to a window with plenty of light.
- **HAVE** the students put the second seed and a wet paper towel in a zip lock bag and tape it to the inside of a closet or a cabinet door.
- **HAVE** the students put the 3<sup>rd</sup> seed in a zip lock bag and set it on the table – no paper towel or anything.
- **CHECK** the three specimens daily for 1-2 weeks. You may have to add water to the paper towels if they become dry.
- **AT THE END** of the allotted time discuss the condition of each seed.
- **DISCUSS** the conditions that grew the seed the best.
- **SAY:** In our spiritual life, we are given the seeds of faith and we need to provide the best soil for them to grow. We need the water of the Holy Spirit (reception of sacraments), the light of Jesus (prayer, Communion, personal relationship with Him) and the warmth of God's love (frequent prayers and adoration).

- **CHECK** to see which specimen has grown the least mold? Why? Record on Science Journal page.
- **DISCUSS** what factors and conditions promoted the growth of the mold.
- **DISCUSS** how every organism in creation needs the right conditions in which to grow.
- **POSIT:** The factors which promoted the growth of the mold bacteria were \_\_\_\_\_.

- **SAY:** This is how Jesus explained the parable to the disciples.
- **READ** Luke 8: 11-15.
- **ASK:** Can you give Jesus' explanation in your own words?
- **HAVE** the students write a reflection paper on the meaning of the good soil in the Parable of the Sower and the Seed.
- **DISCUSS** the reflection paper ideas in class.
- **SHOW** the seed specimens and ask what conditions should they be providing for the seeds of faith to really grow in their life?
- **ASK:** What negative influences could be like the rocky soil or thorns?
- **DISCUSS** student replies.
- **POSIT:** We are given the seeds of faith and must maintain fertile soil for our faith to continue to grow to its maximum potential. A so-so crop is not good enough. We need to have a bumper crop of faith.

## SCIENCE LINKS

[www.easy-kids-science-experiments.com/easy-science-experiments.html](http://www.easy-kids-science-experiments.com/easy-science-experiments.html)

Easy Science Experiments As the mold grows over time have your child track the mold growth. At the end of the project have them note the differences of growth in the mold on the ...

[www.wisegeek.com/what-is-mold.htm](http://www.wisegeek.com/what-is-mold.htm)

What is Mold? I'm in seventh grade and this helped a lot in my "Mold Mania" science fair project. ... there is so much info on this article.. I am in 6th grade it's awesome! ...Good source for students and teachers.

## RELIGION LINKS

[www.ebibleteacher.com/children/lessons/sower.htm](http://www.ebibleteacher.com/children/lessons/sower.htm)

Lesson: A Sower Went Out to Sow Sunday school lesson on the parable of the sower. ... Discuss how the Words of God are seed for them to plant in their friends' hearts. Worksheet: Take home sheet ...

[www.kidssundayschool.com/Gradeschool/Lessons/1sower01.php](http://www.kidssundayschool.com/Gradeschool/Lessons/1sower01.php)

Christian Sunday school lessons for children - Parable of the ... This first lesson of a series of four about the parable of the sower will help the children discover how truly wonderful is the Word of God. ...

[www.kidssundayschool.com/Gradeschool/Lessons/1sower02.php](http://www.kidssundayschool.com/Gradeschool/Lessons/1sower02.php)

Children's Sunday School Lessons - Parable of the Sower ... This second lesson, of a series of four, about the parable of the sower will help the children discover how truly wonderful is the Word of God. ...

Children's bible story. Parable of the Sower

[www.ministry-to-children.com/parable-of-the-sower](http://www.ministry-to-children.com/parable-of-the-sower)

The Parable of the Sower: Children's Sunday School Lesson Print out this free lesson plan for kids Sunday School. It is based on the Bible story where Jesus teaches the parable of the sower. Learning activities included.

## KEY WORDS

- MOLD
- FACTORS
- CONDITIONS
- SPECIMEN

## KEY WORDS

- PARABLE
- SOWER
- FAITH
- CONDITIONS
- SOIL
- SEED