

# Science Lesson Plans

## October 29-November 2

### Standards:

**SPI 0507.2.1** Describe the different types of nutritional relationships that exist among organisms.

**SPI 0507.2.2** Distinguish among symbiotic, commensalism, and parasitic relationship.

**SPI 0507.2.3** Use information about the impact of human actions or natural disasters on the environment to support a simple hypothesis, make a prediction, or draw a conclusion.

**SPI 0507.6.1** Distinguish among the planets according to their known characteristics such as appearance, location, composition, and apparent motion.

### Monday:

1. Read Chapter 3 Lesson 3 Workbook and Do questions
2. Go over as a class
3. Chapter 3 Review Sheet

### Tuesday:

1. Go over Chapter 3 Review Sheet
2. PPT Review Game

### Wednesday:

1. **Chapter 3 Test** (collect Review Sheet with parent signature for 5 EC points)
2. Homework: Groups are assigned different planets—Do: Solar System Information Sheet.

### Thursday: Planet characteristics such as appearance, location, composition, and apparent motion.

1. Group Project: Solar System Information Sheet—Make a poster, model, physical representation. (Be sure to include all the information on your sheet plus a drawing or model of group planet.)

### Friday: Planet characteristics such as appearance, location, composition, and apparent motion.

1. Finish **Group Project**
2. Do: **Planet Graphic Organizer**

Mercury: 57 million kilometers (36 million miles)

Venus: 107 million kilometers (67 million miles)

Earth: 150 million kilometers (93 million miles)

Mars: 229 million kilometers (142 million miles)

Jupiter: 777 million kilometers (483 million miles)

Saturn: 1,429 million kilometers (888 million miles)

Uranus: 2,871 million kilometers (1,784 million miles)

Neptune: 4,496 million kilometers (2,794 million miles)

Pluto: 5,869 million kilometers (3,647 million miles) (though it's not considered a regular planet anymore)

**Science Test**  
**Chapter**  
**Relationships in an ecosystem**

1. What is the role of a producer in a food web? (SPI 0507.2.1)
  - a) to produce water
  - b) to produce food
  - c) to eat other organisms
  - d) to decompose dead animals
  
2. Which would cause a wolf population to increase? (SPI 0507.2.1)
  - a) A lot of rabbits are born one year.
  - b) The forest the wolves live in is flooded.
  - c) It does not rain for a long period of time.
  - d) A record amount of snow falls one winter.
  
3. In a grassland ecosystem, wolves are predators of antelope. What will happen if most of the antelope die? (SPI 0507.2.1)
  - a) Competition between antelope will increase.
  - b) Competition between wolves will decrease.
  - c) Competition between wolves and antelope will increase.
  - d) Competition between wolves will increase.
  
4. Look at the drawings. (SPI 0507.2.1)

How are these animals alike?

- a) Both show a predator.
  - b) Both show a producer.
  - c) Both show a decomposer.
  - d) Both show a consumer.
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5. Fran observed rabbits, wildflowers, and a coyote. Which sequence correctly shows the transfer of energy among these things? (SPI 0507.2.1)
    - a) coyote      wildflowers      rabbit
    - b) coyote      rabbit      wildflowers
    - c) wildflowers      coyote      rabbit
    - d) wildflowers      rabbit      coyote
  
  6. This diagram shows a food chain. Which organism in the food chain is a decomposer? (SPI 0507.2.1)

- a) frog
- b) bacteria
- c) grass
- d) grasshopper

7. Look at the drawing below.

Which organism is responsible for changing the sun's energy into food energy? (SPI 0507.2.1)

- a) organism F
- b) organism G
- c) organism H
- d) organism J

8. In which types of relationship does one organism benefit while the other is neither helped nor harmed? (SPI 0507 2.2)

- a) parasitism
- b) mutualism
- c) predator/prey
- d) commensalism

9. The picture shows bacteria on the roots of a plant. (SPI 0507 2.2)

The bacteria get food from the plant. The plant get nitrogen from the bacteria. What kind of relationship is this?

- a) commensalism
- b) competition
- c) mutualism
- d) parasitism

10. In which type of relationship are both organisms benefiting? (SPI 0507 2.2)

- a) mutualism
- b) parasitism
- c) commensalism
- d) symbiosis

11. Which is an example of a parasite? (SPI 0507 2.2)

- a) a hawk that eats rabbits
- b) a bird that eats ticks off a giraffe
- c) a leech that sucks blood from a fish
- d) a plant that uses nutrients from the soil

12. Which symbiotic relationship is beneficial to one organism but is harmful to the other organism in the relationship? (SPI 0507.2.2)

- a) mutualism
- b) parasitism
- c) adaptation
- d) commensalism

13. Look at the drawing below. (SPI 0507.2.2)

The flower makes nectar for the hummingbird to eat. The bird carries pollen from flower to flower. Which type of relationship is this?

- a) mutualism
- b) parasitism
- c) commensalism
- d) predator/prey

14. An elf own makes its nest in a hole in a cactus. The owl benefits, and the cactus is not affected. What type of relationship is this? (SPI 0507.2.2)

- a) mutualism
- b) commensalism
- c) parasitism
- d) adaptation

15. In which ways can humans have a positive influence on the environment around them? (SPI 0507.2.3)

- a) drive cars more often
- b) leave the lights on
- c) recycle used cans
- d) dump trash

16. Which is an example of how people affect ecosystems? (SPI 0507.2.3)

- a) pollution
- b) volcanoes
- c) earthquakes
- d) hurricanes

17. How could recycling aluminum affect the environment? (SPI 0507.2.3)

- a) Pollution would increase
- b) Pollution would decrease
- c) Rainfall would decrease
- d) Waste would increase

18. What is a harmful substance to the environment called? (SPI 0507.2.3)

- a) Rainfall
- b) Predator
- c) Pollution
- d) Volcano

19. List two things that could affect our environment in a negative way other than pollution. (SPI 0507.2.3)

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20. What is one other way you could help the environment in a positive way other than recycling?

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Parent Signature \_\_\_\_\_ 5pts E.C.

Review Sheet

1	Parasitism	Commensalism	Mutualism
Definition			
Examples			

2. What is the difference between a producer, consumer, and a decomposer?
3. Give an example of a food chain. Include a producer, consumer, and a decomposer.
4. Where do producers get their energy?
5. What is the difference between a predator and prey?
6. List some ways in which humans affect the environment.
7. List some ways in which humans can help the environment.
8. List some natural disasters that could affect the environment in a negative way.
9. List an ecosystem. Name the biotic and abiotic factors in that ecosystem.
10. Vocabulary words to know: predator, prey, producer, consumer, decomposer, parasitism, commensalism, mutualism, ecosystem.

## **Solar System Information**

1. What is your planet?
2. What is the appearance of your planet?
3. What is the location of your planet from the sun?
4. What is the composition of your planet?
5. What is the apparent motion of your planet?
6. Draw a picture of your planet with color.

