

# Sci 8 PMA 1 Review Sheet

Standards: SC.7.N.1.4, SC.7.L.15.2, SC.7.L.15.1, SC.7.L.15.3, SC.7.E.6.2, SC.6.E.6.1, SC.6.E.6.2, SC.6.E.5.1, SC.8.E.5.2

<https://dashboard.blooket.com/set/68d6b28708ae447d5e4458f4>

## Part 1: Fill in the Blank (12 questions)

1. A scientific theory is a well-tested explanation that explains \_\_\_\_\_ things happen.
2. The smallest unit of life that can carry out all life processes is a(n) \_\_\_\_\_.
3. Photosynthesis takes place in the \_\_\_\_\_ of plant cells.
4. The process by which organisms maintain a stable internal environment is called \_\_\_\_\_.
5. The Earth's layers include the crust, mantle, outer core, and \_\_\_\_\_.
6. The force that pulls objects toward the center of the Earth is called \_\_\_\_\_.
7. The cell structure that controls what enters and leaves the cell is the \_\_\_\_\_ membrane.
8. The basic unit of heredity that carries genetic information is called a \_\_\_\_\_.
9. An organism that makes its own food using sunlight is called a(n) \_\_\_\_\_.
10. The movement of tectonic plates is driven by \_\_\_\_\_ currents in the mantle.
11. The process by which water changes from a liquid to a gas is called \_\_\_\_\_.
12. Evolution is really the process of organisms \_\_\_\_\_ over time due to their environment.



## Part 2: Matching (8 questions)

Match the term in Column A with the correct description in Column B. Write the letter of the description next to the number.

| Column A                | Column B                                     |
|-------------------------|----------------------------------------------|
| 1. Mitochondria ____    | A. Produces energy for the cell              |
| 2. Photosynthesis ____  | B. Process that converts sunlight into food  |
| 3. Gravity ____         | C. Force that attracts objects to Earth      |
| 4. Cell membrane ____   | D. Controls what enters and leaves the cell  |
| 5. DNA ____             | E. Contains genetic instructions             |
| 6. Evaporation ____     | F. Liquid water turning into vapor           |
| 7. Homeostasis ____     | G. Maintaining a stable internal environment |
| 8. Tectonic plates ____ | H. Large pieces of Earth's crust that move   |

## Part 3: Short Response (5 questions)

1. Explain why scientific theories can change over time.
2. Describe the role of mitochondria in a cell.
3. What causes earthquakes according to the movement of tectonic plates?
4. Describe how photosynthesis and cellular respiration are connected in the energy cycle of living things.

#### Part 4 : Fill in the Blank

1. The brightness of a star as seen from Earth is called its \_\_\_\_\_.
2. The color of a star indicates its \_\_\_\_\_.
3. The \_\_\_\_\_ is the galaxy that contains our Solar System.
4. Electromagnetic waves with the longest wavelengths are called \_\_\_\_\_.
5. To Measure distance inside the solar system we use \_\_\_\_\_ units, but to measure from a one galaxy to the next we use \_\_\_\_\_.

#### Part 5: Short Answer

6. Put the Moon, Earth, the solar system, the Milky Way, and the universe in order from smallest to largest. Then compare their scale and composition: where is the Sun, and how does a star differ from a rocky body such as the Moon?



7. Star A is blue-white, appears brighter from Earth, and is smaller than Star B. Star B is red, appears dimmer, and is larger. Which star has the higher surface temperature, greater apparent brightness, and greater size? Can apparent brightness alone tell you which star has greater luminosity? Explain.



8. Draw and label a model of the Sun. Include its core, radiative zone, convection zone, and photosphere. Add arrows to show rotation, and include sunspots, a solar flare, and a prominence.

