

# Powerful Sun Vocabulary

**Overview:**

Students review vocabulary associated with Unit 3: Powerful Sun.

**Objectives:**

The student will match the following terms to their definitions: sun, particles, sunspots, gas, diameter, solar flare, solar wind, magnetosphere, and magnetotail.

**Materials:**

- Aurora Alive video playlist AA Ch3 001-006
- STUDENT WORKSHEET: “Crossword Puzzle”

**Activity Procedure:**

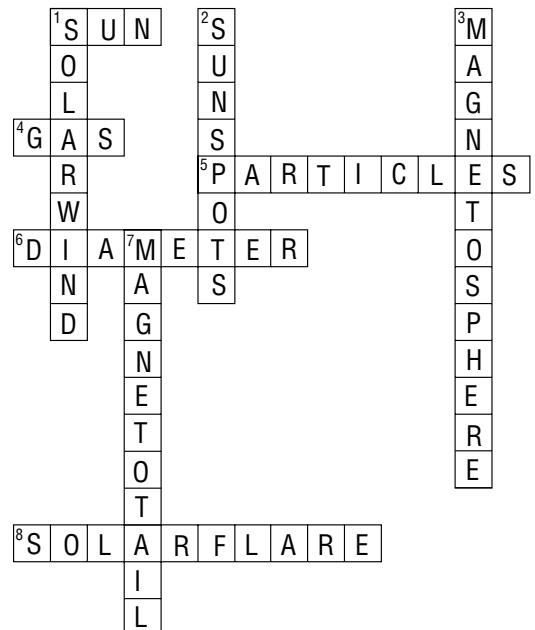
Hand out the STUDENT WORKSHEET: “Crossword Puzzle.” Ask students to complete it by determining the words that complete the puzzle from the clues. Allow students to review the video playlist to find the terms and their definitions.



**Answers to Student Worksheet:**

- Across:**
1. Sun
  4. Gas
  5. Particles
  6. Diameter
  8. Solar Flare

- Down:**
1. Solar Wind
  2. Sunspots
  3. Magnetosphere
  7. Magnetotail



# Crossword Puzzle

**Across:**

1. This star is the primary source of energy for all processes on Earth’s surface.
4. Our sun is a fiery ball that sends light, heat, particles and \_\_\_\_\_ to Earth. (Hint: This substance has no shape or size of its own. Oxygen and nitrogen are examples of this substance, which is not a liquid or a solid)
5. Earth’s magnetosphere is stretched out by solar \_\_\_\_\_ blasting around Earth.
6. This is the distance across a circle, measured through the center.
8. This is the largest, most violent explosion on the sun’s surface. It can be more powerful than a million hydrogen bombs, and can blast billions of the sun’s particles into space. *(two words, use no space between them)*

**Down:**

1. This stream shoots out from the sun into space. It travels past Earth and helps create the aurora. *(two words, use no space between them)*
2. These areas on the sun are dark spots because they are cooler than the rest of the sun. They usually exist in pairs and behave like opposite ends of a horseshoe magnet.
3. This acts like an invisible barrier to solar wind.
7. This part of Earth’s magnetosphere is stretched out by the solar wind.

