



Stars and Brightness

Name: _____

Date: _____

Grade: Grade 5

Part A: Fill in the Blank

Write the missing word or number on each line.

1. Stars first form inside a giant cloud of gas and dust called a _____.
2. After leaving the nebula, a steady star spends most of its life on the _____ sequence.
3. When a medium star runs low on hydrogen, it swells into a red _____.
4. After shedding its outer layers, a medium star leaves behind a hot, dense core called a white _____.
5. Massive stars end their lives in a powerful explosion called a _____.
6. The most massive star cores can collapse into objects with such strong gravity that even light cannot escape, called _____ holes.
7. A huge group of billions of stars held together by gravity is called a _____.
8. Light from the Sun reaches Earth in about eight _____.
9. The closest star beyond the Sun, Proxima Centauri, lies about four _____-years away.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Hubble
Space
Telescope



Orbits Earth
and views
visible and
ultraviolet
light from
above the
atmosphere

James Webb
Space
Telescope

Orbits far
from Earth
and captures
infrared

Part A: Fill in the Blank

Write the missing word or number on each line.

1. Stars first form inside a giant cloud of gas and dust called a nebula .
2. After leaving the nebula, a steady star spends most of its life on the main sequence.
3. When a medium star runs low on hydrogen, it swells into a red giant .
4. After shedding its outer layers, a medium star leaves behind a hot, dense core called a white dwarf .
5. Massive stars end their lives in a powerful explosion called a supernova .
6. The most massive star cores can collapse into objects with such strong gravity that even light cannot escape, called black holes.
7. A huge group of billions of stars held together by gravity is called a galaxy .
8. Light from the Sun reaches Earth in about eight minutes .
9. The closest star beyond the Sun, Proxima Centauri, lies about four light -years away.

Part B: Matching

Match each item on the left to the correct answer on the right.

1. Match each item to its correct answer.

Hubble Space Telescope	→ <u>Orbits Earth and views visible and ultraviolet light from above the atmosphere</u>	Orbits Earth and views visible and ultraviolet light from above the atmosphere
James Webb Space Telescope	<u>Orbits far from Earth and captures infrared light to see distant early</u>	Orbits far from Earth and captures