

8th Grade, Week 5/18-5/22

**Due: TUESDAY 5/26 (5/25 Memorial Day Holiday)**

**Monday:**

Math- Khan Academy (22 pts)

Angles, parallel lines, & transversals (video, 5pts)

Parallel & perpendicular lines (video, 5pts)

Missing angles with a transversal (video, 5pts)

Angle relationships with parallel lines (exercise, 7pts)

**Tuesday:** Virtual Meeting at 9:00am

Math- Khan Academy (13 pts)

Measures of angles formed by a transversal (video, 5pts)

Equation practice with angle addition (exercise, 4pts)

Equation practice with angles (exercise, 4pts)

Science- Chpt 12 Vocab Review pg 541 1-14

History- Read Lesson 12.5 pg 554-559 Answer the 3 reading check questions

**Wednesday:**

Math- Khan Academy (21 pts)

Angles in a triangle sum to  $180^\circ$  proof (video, 5 pts)

Find angles in triangles (exercise, 7pts)

Isosceles & equilateral triangles problems (video, 5pts)

Find angles in isosceles triangles (exercise, 4pts)

**Thursday:** Virtual Meeting at 9:00am

Math- Khan Academy (22 pts)

Triangle exterior angle example (video, 5pts)

Worked example: Triangle angles (intersecting lines) (video, 5pts)

Work example: Triangle angles (diagram) (video, 5pts)

Finding angle measures using triangles (exercise, 7pts)

Science- Chpt 12 Review Worksheet

History- Pg 560-561 Complete DBQ 1-3

**Friday:**

Math- Khan Academy (25 pts)

Triangle angle challenge problem (video, 5pts)

Triangle angle challenge problem 2 (video, 5pts)

Triangle angle review (article, 5pts)

Geometry: Quiz 1 (10pts)

# Chapter Review

## Stars and Galaxies

**CHAPTER 12**

### Part A. Vocabulary Review

**Directions:** Identify the item in Column II that matches the description in Column I by writing the correct letter in the space provided.

**Column I**

- \_\_\_\_\_ 1. galaxies with an oval shape; they vary greatly in size and the number of stars they contain
- \_\_\_\_\_ 2. a process in which two nuclei combine to form a nucleus with a higher mass
- \_\_\_\_\_ 3. the name for the explosion that may occur before a supergiant star dies
- \_\_\_\_\_ 4. a large cloud of gas and dust in space where stars are formed
- \_\_\_\_\_ 5. a cluster of billions of stars
- \_\_\_\_\_ 6. the amount of light energy released from an object each second
- \_\_\_\_\_ 7. the apparent magnitude a star would have if it were 32.6 light-years away from Earth
- \_\_\_\_\_ 8. a single point where all the matter from an extremely massive neutron star has condensed and from which no light can escape
- \_\_\_\_\_ 9. galaxies that are neither spiral or elliptical
- \_\_\_\_\_ 10. the brightness of a star as observed from Earth, which depends on its actual brightness and distance from Earth
- \_\_\_\_\_ 11. the distance light travels in one year; equal to about 9.5 trillion kilometers
- \_\_\_\_\_ 12. galaxies that appear to have spiral arms
- \_\_\_\_\_ 13. a very small, dense remnant of a supernova explosion composed mostly of neutrons
- \_\_\_\_\_ 14. theory that the universe originated from a tiny point containing all matter and energy that began to expand rapidly and cool

**Column II**

- A. absolute magnitude
- B. apparent magnitude
- C. black hole
- D. elliptical galaxies
- E. galaxy
- F. irregular galaxies
- G. light-year
- H. nebula
- I. neutron star
- J. nuclear fusion
- K. luminosity
- L. spiral galaxies
- M. supernova
- N. big bang theory

## Content Vocabulary CONTINUED

**Directions:** Circle the word that correctly completes each sentence.

12. The (absolute/apparent) magnitude of a star is its brightness as observed from Earth and depends on its actual brightness and distance from Earth.
13. (Spiral/Irregular) galaxies have a patchy appearance and are difficult to classify.
14. (Supergiants/Neutron stars), the largest stars, are as big as the orbits of the outer planets of our solar system and are much more massive than the Sun.
15. Each chemical element has its own unique (continuous/absorption) spectrum.
16. A light-year is the distance that (interstellar dust/light) travels in one year, and it is equal to about 9.5 trillion kilometers, or 63,000 AU.
17. The (luminosity/brightness) of an object is how much light energy it emits per second.
18. The absolute magnitude is the apparent magnitude a star would have if it were 32.6 (astronomical units/light-years) away from Earth.
19. The (big bang theory/theory of gravitation) is a hypothesis about how the universe formed and explains why it is currently expanding.
20. (Elliptical/irregular) galaxies have an oval shape and vary greatly in size and number of stars.
21. In a nuclear (fusion/fission) reaction, two nuclei combine to form a nucleus with a higher mass.
22. The space between stars is called (interstellar/nebular) space and contains mostly gas and dust at a very low density.
23. A (star/black hole) is a large ball of gas that emits energy produced by nuclear reactions in its interior.
24. A (hotter/cooler) star will produce radiation with shorter wavelengths.
25. The (lithosphere/photosphere) of a star is the area from which most of the star's light is emitted.
26. The Sun is on the (upper/main) sequence of the H-R diagram.