



EXPERIENCE
ASTRONOMY

Quiz Book

Lesson 1: Course Introduction

Circle the best answer for each question.

1. When you are assigned an observation activity, you can do the activity whenever it is most convenient for you.

- a. True
- b. False

2. What day of creation did God create the sun, moon, and stars?

- a. 1
- b. 2
- c. 3
- d. 4
- e. 5
- f. 6

3. What does God create on the first three days of creation?

- a. Earth, wind, and fire
- b. Sun, moon, and stars
- c. Water creatures, sky creatures, and land creatures
- d. Light, waters, sky, and land

4. Which of these is not a reason why God created the lights in the sky?

- a. To mark the seasons of life
- b. To mark days and years
- c. To separate the day from the night
- d. To give light on the earth
- e. To be able to predict the future

5. This is a course on astrology.

- a. True
- b. False

6. Astronomy can be used to help you navigate.

- a. True
- b. False

7. Our modern calendars have no basis in astronomy.

- a. True
- b. False

8. Astronomy is a relatively new science. Not many ancient cultures were interested in the sky.

- a. True
- b. False

9. What does Psalm 8:3 say?

- a. "And God said, Let there be lights in the firmament of the heaven to divide the day from the night"
- b. "When I consider thy heavens, the work of thy fingers, the moon and the stars, which thou hast ordained."
- c. "The heavens declare the glory of God."
- d. "And God made two great lights; the greater light to rule the day, and the lesser light to rule the night."

Lesson 2: The Movement of the Sun

Circle the best answer for each question.

1. The brightest object in our sky is...

- a. The sun
- b. The moon
- c. The planet Venus
- d. Haley's comet

2. The Pharaohs of Egypt would go down to the Nile River to worship the sun god, whose name was...

- a. Khnum
- b. Nut
- c. Ra
- d. Horus

3. The people of Israel were enslaved for hundreds of years in the nation of...

- a. Assyria
- b. Babylon
- c. Canaan
- d. Egypt

4. The 10 plagues were designed by God to...

- a. Show how powerless the gods of Egypt were
- b. Show his power over the natural world
- c. Rescue his people from slavery in Egypt
- d. All of the above

5. How many chambers of the underworld did Ra travel through each night?

- a. 6
- b. 8
- c. 12
- d. 20

6. Why does knowing the Egyptian beliefs about Ra help us to understand the Exodus story?

- a. God was contrasting himself to the god Ra. It looked as if God was opening the underworld before their eyes, giving light to Israel all night long, and then crushing the Egyptians right at the moment of sunrise, when Ra should have saved them.
- b. God was comparing himself to Ra, showing Egypt that he and Ra were actually the same god.
- c. There is no real connection between the Exodus story and Egyptians myths about Ra.
- d. God was teaching Israel that Ra was a real god—just not as powerful as He is.

7. The model of the universe where the Earth is at the center and everything else revolves around it is called...

- a. Heliocentric
- b. Geocentric
- c. Lunarcentric
- d. Terrestrial

8. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Lunarcentric
- b. Terrestrial
- c. Geocentric
- d. Heliocentric

9. How much of the matter in the solar system does the sun contain?

- a. The sun contains about 50% of the stuff in the solar system
- b. The sun contains about 85% of the stuff in the solar system
- c. The sun contains about 75% of the stuff in the solar system
- d. The sun contains over 99% of the stuff in the solar system

10. The Earth spins around on its...

- a. Axiom
- b. Axle
- c. Axis
- d. Axe

11. Looking down on the Earth at the North Pole, what direction does the Earth spin?

- a. Counterclockwise
- b. Clockwise

12. The Sun...

- a. Rises and sets on the Eastern horizon
- b. Rises and sets on the Western horizon
- c. Rises on the Eastern horizon and sets on the Western horizon
- d. Rises on the Western horizon and sets on the Eastern horizon

13. The line where sunlit half of the Earth touches the dark half is called the...

- a. Terabyte
- b. Terminator
- c. Term Limit
- d. Terrestrial Line

14. The time after sunset or before sunrise when the atmosphere above our heads is lit up by sunlight is called...

- a. Pink Sky
- b. Morning Star
- c. Afterglow
- d. Twilight

15. The point right over the head of an observer on the Earth is called...

- a. The Zenith
- b. The Zebra
- c. The Zero Point
- d. The Zealot

16. The line drawn from due south, straight over your head, and through due north is called...

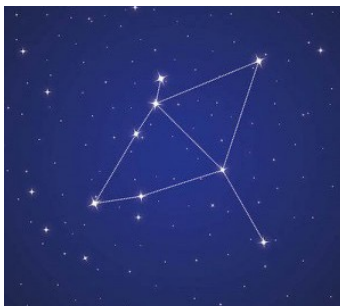
- a. The Mercury Line
- b. The Meridian
- c. The Mermaid
- d. The Meropic Line

Lesson 3: The Summer Constellations

Circle the best answer for each question.

1. What is this constellation?

- a. Lyra
- b. Hercules
- c. Aquila
- d. Cygnus



2. A light year is a measurement of time.

- a. True
- b. False

3. Vega, Deneb, and Altair are the three stars of the Summer Triangle.

- a. True
- b. False

4. Polaris is an important star to Earth observers because...

- a. It is really close to the celestial equator
- b. It is really close to the celestial south pole
- c. It is really close to the celestial north pole
- d. It is the brightest star in the night sky

5. From the standpoint of an observer on Earth, the point where the sky meets the land or water is called...

- a. Twilight
- b. The celestialequator
- c. The terminator
- d. The horizon

6. How fast does light go?

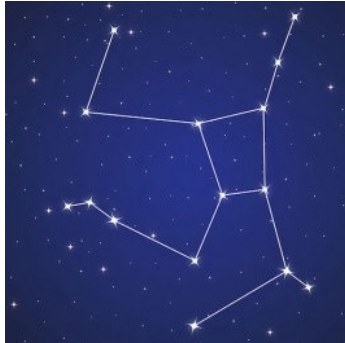
- a. Over 186,000 miles per second
- b. Over 186,000 miles per hour
- c. Slightly faster than the speed of sound
- d. About as fast as a commercial airplane

7. A formal group of stars that make a picture in the sky is called...

- a. A celestial globe
- b. A celestial sphere
- c. A comet
- d. A constellation

8. What is this constellation?

- a. Lyra
- b. Cygnus
- c. Aquila
- d. Hercules



9. Lyra was said to be the golden lyre of the legendary musician...

- a. Hercules
- b. Zeus
- c. Aquila
- d. Orpheus

10. Cygnus is the Greek word for...

- a. Eagle
- b. Swan
- c. Bird
- d. Hawk

11. How many official constellation are there?

- a. 81
- b. 88
- c. 99
- d. 48

12. Aquila is an eagle, named after the pet bird of the Greek god...

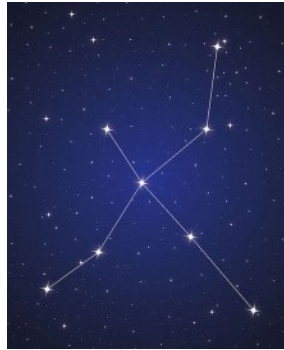
- a. Hercules
- b. Zeus
- c. Orpheus
- d. Cygnus

13. Job 22 says God hangs the Earth on...

- a. Air
- b. His hand
- c. Nothing
- d. A hook

14. What is this constellation?

- a. Hercules
- b. Aquila
- c. Cygnus
- d. Lyra



15. How many labors did Hercules accomplish?

- a. 10
- b. 11
- c. 12
- d. 88

Lesson 4: The Magnitude of Stars

Circle the best answer for each question.

1. Stars with a higher magnitude number are brighter?

- a. True
- b. False

2. What is light pollution?

- a. Litter on the side of the road
- b. Exhaust from cars
- c. Poison in our water supply
- d. Extra light in the atmosphere

3. What is the name of the Greek astronomer who made a catalogue of 48 constellations that became the basis for our constellations?

- a. Poseidon
- b. Pegasus
- c. Pandora
- d. Ptolemy

4. Which star has a magnitude of 0 (zero)?

- a. Deneb
- b. Sirius
- c. Venus
- d. Vega

5. What impacts a star's apparent magnitude?

- a. Its absolute magnitude and how good our eyesight is
- b. Its distance from us and its size
- c. Its absolute magnitude and its size
- d. Its absolute magnitude and its distance from us

6. The model of the universe where the Earth is at the center and everything else revolves around it is called...

- a. Geocentric
- b. Terrestrial
- c. Heliocentric
- d. Lunarcentric

7. How many official constellation are there?

- a. 48
- b. 88
- c. 99
- d. 81

8. Our solar system lives in...

- a. The Milky Way Galaxy
- b. The Snickers Galaxy
- c. The Andromeda Galaxy

9. The brighter a star is in our sky...

- a. The greater its apparent magnitude
- b. The bigger the star is
- c. The closer it is to us
- d. The greater its absolute magnitude

10. God promised Abraham...

- a. He would be the father of a great nation
- b. He would give his family a special land
- c. Through his family, all the families of the Earth would be blessed
- d. All of the above

11. How many stars are visible to the naked eye if there is no light pollution?

- a. 4,048 stars
- b. 9,096 stars
- c. Billions of stars
- d. Millions of stars

12. The Earth spins around on its...

- a. Axe
- b. Axle
- c. Axiom
- d. Axis

13. Polaris is an important star to Earth observers because...

- a. It is the brightest star in the night sky
- b. It is really close to the celestial north pole
- c. It is really close to the celestial south pole
- d. It is really close to the celestial equator

Lesson 5: The Northern Constellations

Circle the best answer for each question.

1. A group of stars that make a popular shape in the sky that isn't a constellation

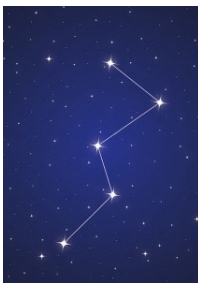
- a. Axis
- b. Asterism
- c. Asteroid
- d. Astronomical Unit

2. The brighter a star is in our sky...

- a. The greater its absolute magnitude
- b. The bigger the star is
- c. The greater its apparent magnitude
- d. The closer it is to us

3. What is this constellation?

- a. Ursa Minor
- b. Andromeda
- c. Ursa Major
- d. Cassiopeia



4. Polaris is in what constellation?

- a. Cassiopeia
- b. Ursa Minor
- c. Ursa Major
- d. The Big Dipper

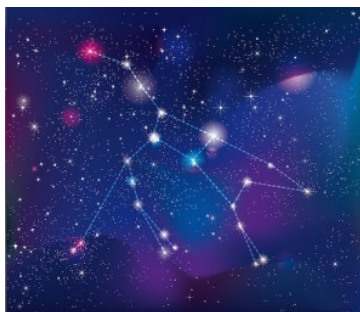
5. What are these two bright shapes often called?

- a. The Big Dipper and the Little Dipper
- b. Ursa Minor and Cassiopeia
- c. The Big Dog and the Little Dog
- d. Ursa Major and Cassiopeia



6. What is this constellation?

- a. Andromeda
- b. Ursa Minor
- c. Cassiopeia
- d. Ursa Major



7. Polaris is known as...

- a. The North Star
- b. The South Star
- c. The Biggest Star
- d. The Brightest Star

8. From Greece, constellations like Cassiopeia and Ursa Major never rise or set.

- a. True
- b. False

9. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Terrestrial
- b. Lunarcentric
- c. Heliocentric
- d. Geocentric

10. The Bible doesn't mention any specific constellations.

- a. True
- b. False

11. The point right over the head of an observer on the Earth is called...

- a. The Zenith
- b. The Zebra
- c. The Zealot
- d. The Zero Point

12. The celestial north pole is the location on the celestial sphere at which the Earth's north pole points.

- a. True
- b. False

13. This woman was a nymph who was part of Artemis' hunting party.

- a. Arcas
- b. Callisto
- c. Cassiopeia
- d. Andromeda

14. This woman was the mythical queen of Ethiopia who thought she was more beautiful than anyone.

- a. Callisto
- b. Cassiopeia
- c. Andromeda
- d. Arcas

Lesson 6: The Planet Saturn

Circle the best answer for each question.

1. The planet Saturn isn't mentioned in the Bible.

- a. True
- b. False

2. The word "planet" comes from a phrase that means...

- a. Big ball of dirt
- b. Wandering star
- c. Celestial light
- d. Revolving star

3. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Heliocentric
- b. Lunarcentric
- c. Geocentric
- d. Terrestrial

4. Human beings could some day visit Saturn's largest moon and land on its surface.

- a. True
- b. False

5. Which of these planets is a terrestrial planet?

- a. Jupiter
- b. Uranus
- c. Saturn
- d. Venus

6. Saturn is 95 times more massive than the Earth.

- a. True
- b. False

7. Which of these planets is a gas giant?

- a. Venus
- b. Mars
- c. Jupiter
- d. Mercury

8. It takes longer for Saturn to go around the sun than for the Earth to go around the sun.

- a. True
- b. False

9. Why won't you find the planets on a celestial sphere?

- a. Because the planets move in our sky in relation to the background stars
- b. Because the planets aren't bright enough to see in the sky
- c. Because planets are not stars, so astronomers aren't interested in them
- d. Because celestial globe makers are lazy people

10. Saturn's largest moon is called what?

- a. Zeus
- b. Cronus
- c. Titan
- d. Molech

11. The ecliptic is...

- a. The apparent path of the sun through the sky
- b. The apparent path of the planet Saturn
- c. The apparent path of the stars through the sky
- d. An eclipse of the sun

12. The model of the universe where the Earth is at the center and everything else revolves around it is called...

- a. Geocentric
- b. Terrestrial
- c. Heliocentric
- d. Lunarcentric

Lesson 7: The Seasonal Skies (Part 1)

Circle the best answer for each question.

1. How many official constellation are there?

- a. 81
- b. 48
- c. 99
- d. 88

2. The winter solstice falls during...

- a. January
- b. November
- c. February
- d. December

3. What is the winter solstice?

- a. The day with the least amount of daylight
- b. The time when the sun rises and sets on the horizon the furthest south it will go
- c. Both of these

4. Why are the zodiac constellations special?

- a. Because they are brighter than other constellations
- b. Because they touch the ecliptic
- c. Because they help me read my horoscope
- d. Because they are easier to find than other constellations

5. Why do we see different constellations during different times of the year?

- a. Because the moon is too bright on certain nights to see the constellations of the Zodiac
- b. Because the Earth spins on its axis, making some constellations brighter than others
- c. Because the stars turn off during the daytime
- d. Because of the Earth's rotation around the sun, the night side of the Earth faces different directions in space throughout the year

6. The term “equinox” means...

- a. “Equal rights”
- b. “Equal knocks”
- c. “Equal night”
- d. “Equal day”

7. The Earth is tilted.

- a. True
- b. False

8. A year is...

- a. The amount of time it takes for the Earth to revolve around the sun
- b. The amount of time it takes for light to travel one mile
- c. Equal to 24 hours
- d. The amount of time it take for you to complete your homework

9. The celestial north pole is the location on the celestial sphere at which the Earth’s north pole points.

- a. True
- b. False

10. The sun rises and sets on about the same place on the horizon every day of the year.

- a. True
- b. False

11. What does the word “solstice” mean?

- a. “Sun stands still”
- b. “Sonny Bono and Cher”
- c. “Sun moves south”
- d. “Sun on the horizon”

12. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Heliocentric
- b. Terrestrial
- c. Lunarcentric
- d. Geocentric

13. The summer solstice falls during...

- a. June
- b. July
- c. August
- d. May

14. Polaris is known as...

- a. The brightest star
- b. The North Star
- c. The South Star
- d. The biggest star

Lesson 8: The Seasonal Skies (Part 2)

Circle the best answer for each question.

1. The Tropic of Cancer is...

- a. The latitude line in the southern hemisphere where the sun reaches the zenith on the summer solstice
- b. The latitude line in the northern hemisphere where the sun reaches the zenith on the summer solstice
- c. The latitude line in the northern hemisphere where the sun reaches the zenith on the winter solstice
- d. The latitude line in the southern hemisphere where the sun reaches the zenith on the winter solstice

2. The Earth is tilted how much?

- a. 23.5°
- b. It isn't tilted
- c. 45°
- d. 90°

3. Why is the region north of the Arctic Circle known as the Land of the Midnight Sun?

- a. Because at midnight, the sun sets.
- b. Because the sun never sets north of the Arctic Circle all year.
- c. Because on the summer solstice, these areas experience over 24 hours of daylight.
- d. Because the sun rises at midnight on the winter solstice.

4. Why do we see different constellations during different times of the year?

- a. Because the moon is too bright on certain nights to see the constellations of the Zodiac
- b. Because the stars turn off during the daytime
- c. Because of the Earth's rotation around the sun, the night side of the Earth faces different directions in space throughout the year
- d. Because the Earth spins on its axis, making some constellations brighter than others

5. The North Pole is measured at...

- a. 90° South
- b. 45° North
- c. 90° North
- d. 0°

6. There are no permanent human settlements in the Arctic Circle.

- a. True
- b. False

7. The sun rises and sets on about the same place on the horizon every day of the year.

- a. True
- b. False

8. Why are the zodiac constellations special?

- a. Because they are easier to find than other constellations
- b. Because they are brighter than other constellations
- c. Because they help me read my horoscope
- d. Because they touch the ecliptic

9. What is polar night?

- a. When certain regions of the Earth experience over 24 hours where the sun doesn't rise
- b. When the sun rises in the middle of the night in the Arctic Circle
- c. When polar bears hibernate
- d. When the sun sets on the winter solstice

10. The Temperate Zone in the northern hemisphere is...

- a. The region between the Tropics and the Arctic Circle
- b. The region that receives the most amount of sunlight
- c. The region that receives the least amount of sunlight
- d. The region where the sun reaches the zenith on the summer solstice

11. What does the word "solstice" mean?

- a. "Sun stands still"
- b. "Sonny Bono and Cher"
- c. "Sun moves south"
- d. "Sun on the horizon"

12. The winter solstice falls during...

- a. January
- b. November
- c. February
- d. December

Lesson 9: The Fall Constellations

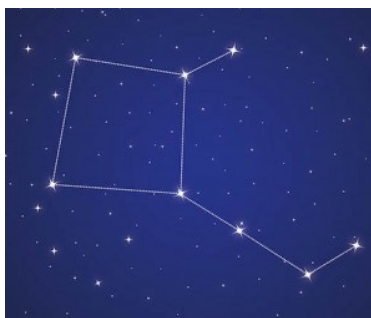
Circle the best answer for each question.

1. Can you see summer constellations like Lyra, Cygnus, or Aquila all winter long?

- a. Yes. Those constellations are visible all year long.
- b. No. The sun is up during part of the winter when those constellations are above us.
- c. It depends on how cloudy it is outside.

2. What is this constellation?

- a. Pegasus
- b. Pisces
- c. Pisces Austrinus
- d. Perseus



3. A group of stars that make a popular shape in the sky that isn't a constellation

- a. Asteroid
- b. Asterism
- c. Axis
- d. Astronomical Unit

4. Aquarius means...

- a. Water bearer
- b. Watercolor
- c. Waterfall
- d. Harmony and understanding, sympathy and trust abounding

5. Who was brought to Olympus to be the cup-bearer for the gods?

- a. Perseus
- b. Medusa
- c. Ganymede
- d. Typhon

6. What is this constellation?

- a. Pisces
- b. Pisces Austrinus
- c. Perseus
- d. Pegasus

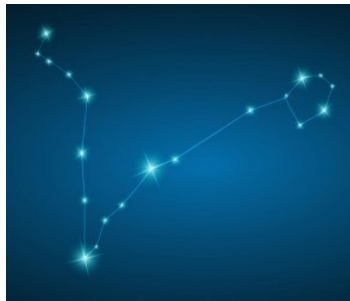


7. The Andromeda Galaxy is part of the Milky Way Galaxy.

- a. True
- b. False

8. What is this constellation?

- a. Perseus
- b. Pisces
- c. Pegasus
- d. Pisces Austrinus



9. This woman was the mythical queen of Ethiopia who thought she was more beautiful than anyone.

- a. Cassiopeia
- b. Arcas
- c. Andromeda
- d. Callisto

10. Stars with a higher magnitude number are brighter?

- a. True
- b. False

11. What is the name of the flying horse that came from the body of Medusa?

- a. Pisces
- b. Pegasus
- c. Pisces Austrinus
- d. Perseus

12. What is the first magnitude star in Pisces Austrinus?

- a. Fomalhaut
- b. Fortune
- c. Fishmonger
- d. Foreteller

Lesson 10: The Zodiac (Part 1)

Circle the best answer for each question.

1. Which astronomical term is not mentioned in Job 38?

- a. The Bear
- b. Orion
- c. Mazzaroth
- d. Cassiopeia

2. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Lunarcentric
- b. Geocentric
- c. Terrestrial
- d. Heliocentric

3. The sun is in each zodiac constellation for the same amount of time.

- a. True
- b. False

4. The ecliptic is...

- a. An eclipse of the sun
- b. The apparent path of the stars through the sky
- c. The apparent path of the planet Saturn
- d. The apparent path of the sun through the sky

5. How many official constellations are there?

- a. 48
- b. 88
- c. 81
- d. 99

6. How many traditional zodiac constellations are there?

- a. 12
- b. 13
- c. 7
- d. 6

7. Astronomy and astrology are the same field of study.

- a. True
- b. False

8. Why are the zodiac constellations special?

- a. Because they are brighter than other constellations
- b. Because they touch the ecliptic
- c. Because they are easier to find than other constellations
- d. Because they help me read my horoscope

9. Which of these is not a reason why God created the lights in the sky?

- a. To give light on the earth
- b. To separate the day from the night
- c. To mark the seasons of life
- d. To be able to predict the future
- e. To mark days and years

10. The Earth is tilted.

- a. True
- b. False

Lesson 11: The Zodiac (Part 2)

Circle the best answer for each question.

1. What is this constellation?

- a. Gemini
- b. Aries
- c. Capricornus
- d. Taurus



2. The star Aldebaran is close enough to the ecliptic, it can be covered by the moon at times.

- a. True
- b. False

3. In the times of the ancient Greeks, the sun was in Aries at what time of year?

- a. The autumnal equinox
- b. The wintersolstice
- c. The vernal equinox
- d. The summer solstice

4. Aquarius means...

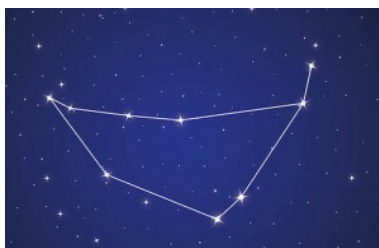
- a. Waterfall
- b. Water bearer
- c. Watercolor
- d. Harmony and understanding, sympathy and trust abounding

5. The two brightest stars in Gemini are called what?

- a. Homer and Marge
- b. Zeus and Leda
- c. Aldebaran and Polaris
- d. Pollux and Castor

6. What is this constellation?

- a. Aries
- b. Capricornus
- c. Gemini
- d. Taurus



7. What is the name for the mysterious blue or purple glow that sometimes appears above the mast of a ship during a storm?

- a. St. Elmo's Fire
- b. St. Big Bird's Fire
- c. Star light
- d. Torch light

8. How many traditional zodiac constellations are there?

- a. 6
- b. 13
- c. 7
- d. 12

9. The constellation Taurus was seen as...

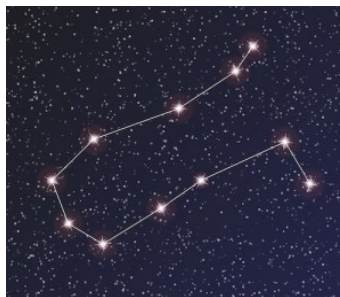
- a. The Bull of Heaven in Sumeria
- b. Apis in Egypt
- c. Zeus in Greece
- d. All of the above

10. Astronomy and astrology are the same field of study.

- a. True
- b. False

11. What is this constellation?

- a. Aries
- b. Taurus
- c. Gemini
- d. Capricornus



12. The brightest first magnitude star in Taurus is called what?

- a. Fomalhaut
- b. Aldebaran
- c. Apis
- d. Castor

13. Which constellation begins the traditional list of Zodiac constellations?

- a. Capricornus
- b. Gemini
- c. Taurus
- d. Aries

14. In the times of the ancient Greeks, the sun was in Capricornus at what time of year?

- a. The vernal equinox
- b. The autumnal equinox
- c. The winter solstice
- d. The summer solstice

15. Psalm 19 says God set _____ in the heavens for the sun.

- a. A bed chamber
- b. A track
- c. A tent
- d. A course

Lesson 12: The Planet Jupiter

Circle the best answer for each question.

1. Jupiter's big famous storm that 3 Earths can fit inside is called...

- a. The Great Spot
- b. The Great Blue Spot
- c. The Big Dark Spot
- d. The Great Red Spot

2. Which of these is not a moon of Jupiter?

- a. Ganymede
- b. Callisto
- c. Titan
- d. Europa

3. Jupiter has over 60 moons, more than any other planet.

- a. True
- b. False

4. A planet's orbital period is...

- a. The amount of time it takes to go around the sun
- b. The amount of time it takes to orbit the Earth
- c. The amount of time it takes to spin on its own axis
- d. The amount of time it takes to go through one sign of the Zodiac

5. Jupiter is a terrestrial planet.

- a. True
- b. False

6. Jupiter is the brightest object in the night sky.

- a. True
- b. False

7. How long does it take Jupiter to orbit the sun?

- a. 24.45 Earth years
- b. 29.45 Earth years
- c. 11.86 Earth years
- d. 1 Earth year

8. Jupiter is the largest planet in the solar system.

- a. True
- b. False

9. Jupiter is the fastest spinning planet in the solar system.

- a. True
- b. False

10. What was Jupiter's Greek name?

- a. Ganymede
- b. Zeus
- c. Marduk
- d. Jupiter

11. The word "planet" comes from a phrase that means...

- a. Revolving stars
- b. Big ball of dirt
- c. Celestial light
- d. Wandering star

Lesson 13: Orion

Circle the best answer for each question.

1. In Greek mythology, the character of Orion was a great...

- a. Moonwalker
- b. Hunter
- c. Metal Worker
- d. Poet

2. Orion's Hebrew name is mentioned in the Bible more than any other constellation.

- a. True
- b. False

3. The Orion Nebula can be found in...

- a. Orion's right knee
- b. Orion's left shoulder
- c. Orion's belt
- d. Orion's sword

4. The part of Orion closest to the celestial equator is...

- a. Rigel
- b. Betelgeuse
- c. Nimrod
- d. Orion's belt

5. Rigel can be found at...

- a. Orion's left shoulder
- b. Orion's right shoulder
- c. Orion's right knee
- d. Orion's belt

6. The Hebrews called Orion...

- a. Keciyl
- b. Babel
- c. Nimrod
- d. Orion

7. The constellations Orion and Scorpius can be found close together in the sky.

- a. True
- b. False

8. Betelgeuse can be found at...

- a. Orion's left shoulder
- b. Orion's left knee
- c. Orion's belt
- d. Orion's right knee

9. The Babylonians called Orion...

- a. Orion
- b. Keciyl
- c. Nimrod
- d. Babel

10. How many official constellation are there?

- a. 48
- b. 88
- c. 81
- d. 99

11. How many traditional zodiac constellations are there?

- a. 12
- b. 13
- c. 7
- d. 6

Lesson 14: The Heliocentric Model

Circle the best answer for each question.

1. This thinker is credited with creating a mathematical model based on the geocentric model

- a. Aristotle
- b. Pythagoras
- c. Aristarchus
- d. Ptolemy

2. Why didn't most of the ancient Greeks believe in the heliocentric model?

- a. There was no visible parallax of the stars.
- b. The Earth appeared to be stable.
- c. Both of these reasons.

3. Why didn't the ancient Greeks see parallax in the stars?

- a. Because everyone thought Aristotle had a really nice beard.
- b. Because they were looking for it at the wrong time of year.
- c. Because they didn't have the observation equipment to notice it.
- d. Because they believed the Earth had to be at the center of the universe.

4. According to Aristotle, the lunar eclipse helped to prove...

- a. The stars are very far from the Earth
- b. The Earth is a sphere
- c. The Earth orbits the sun
- d. The Earth is flat

5. Who came up with the laws of planetary motion?

- a. Johannes Kepler
- b. Aristarchus
- c. Nicolaus Copernicus
- d. Galileo Galilei

6. What is it called when a planet loops backward in its path through the background stars?

- a. Radical motion
- b. Recession motion
- c. Retrograde motion
- d. Relative motion

7. What medieval thinker is famous for reintroducing the heliocentric model?

- a. Aristarchus
- b. Galileo Galilei
- c. Johannes Kepler
- d. Nicolaus Copernicus

8. The first thinker believed to promote the heliocentric model was...

- a. Ptolemy
- b. Aristotle
- c. Aristarchus
- d. Pythagoras

9. Who discovered the moons of Jupiter?

- a. Galileo Galilei
- b. Aristarchus
- c. Nicolaus Copernicus
- d. Johannes Kepler

10. What Greek thinker is the first credited as believing in a spherical Earth?

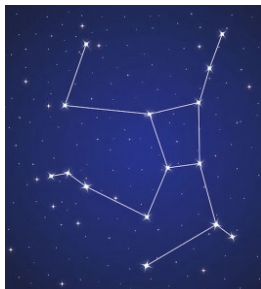
- a. Aristarchus
- b. Aristotle
- c. Ptolemy
- d. Pythagoras

Lesson 15: Midterm Exam

Circle the best answer for each question.

1. What is this constellation?

- a. Aquila
- b. Lyra
- c. Hercules
- d. Cygnus



2. Why are the zodiac constellations special?

- a. Because they are easier to find than other constellations
- b. Because they are brighter than other constellations
- c. Because they help me read my horoscope
- d. Because they touch the ecliptic

3. If you lived at the North Pole, the North Celestial Pole would be at your zenith.

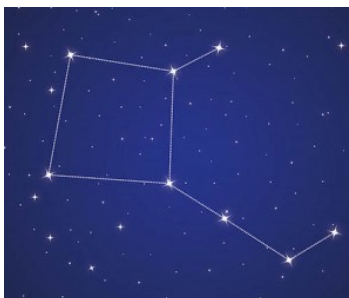
- a. True
- b. False

4. The Earth is tilted how much?

- a. It's not.
- b. 90°
- c. 23.5°
- d. 45°

5. What is this constellation?

- a. Perseus
- b. Pegasus
- c. Pisces
- d. Pisces Austrinus



6. Can you see summer constellations like Lyra, Cygnus, or Aquila all winter long?

- a. No. The sun is up during part of the winter when those constellations are above us.
- b. Yes. Those constellations are visible all year long.
- c. It depends on how cloudy it is outside.

7. Which is the right order of the Zodiac constellations?

- a. Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aquarius, Pisces
- b. Aquarius, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aries, Pisces
- c. Aries, Taurus, Gemini, Capricornus, Leo, Virgo, Libra, Scorpius, Sagittarius, Cancer, Aquarius, Pisces
- d. Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Sagittarius, Scorpius, Capricornus, Aquarius, Pisces

8. Jupiter is the fastest spinning planet in the solar system.

- a. True
- b. False

9. Jupiter has over 60 moons, more than any other planet.

- a. True
- b. False

10. On the summer solstice, north of the Arctic Circle, the sun is up for over 24 hours.

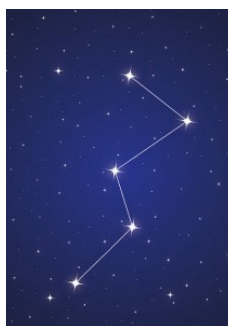
- a. True
- b. False

11. What medieval thinker is famous for reintroducing the heliocentric model?

- a. Johannes Kepler
- b. Galileo Galilei
- c. Nicolaus Copernicus
- d. Aristarchus

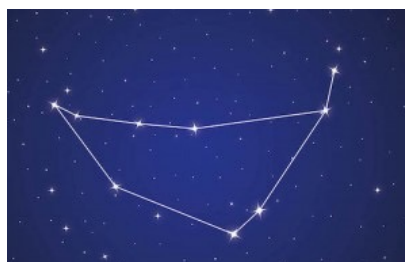
12. What is this constellation?

- a. Ursa Minor
- b. Andromeda
- c. Ursa Major
- d. Cassiopeia



13. What is this constellation?

- a. Taurus
- b. Capricornus
- c. Gemini
- d. Aries

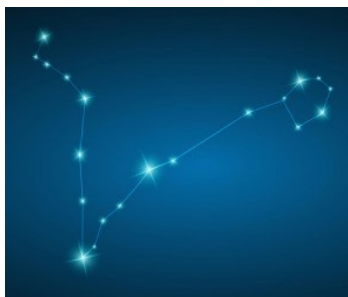


14. Who discovered the moons of Jupiter?

- a. Johannes Kepler
- b. Nicolaus Copernicus
- c. Galileo Galilei
- d. Aristarchus

15. What is this constellation?

- a. Perseus
- b. Pisces Austrinus
- c. Pegasus
- d. Pisces



16. The first thinker believed to promote the heliocentric model was...

- a. Ptolemy
- b. Pythagoras
- c. Aristarchus
- d. Aristotle

17. Astronomy and astrology are the same field of study.

- a. True
- b. False

18. What was Jupiter's Greek name?

- a. Jupiter
- b. Ganymede
- c. Zeus
- d. Marduk

19. Who came up with the laws of planetary motion?

- a. Aristarchus
- b. Johannes Kepler
- c. Galileo Galilei
- d. Nicolaus Copernicus

20. The celestial north pole is the location on the celestial sphere at which the Earth's north pole points.

- a. True
- b. False

21. The two brightest stars in Gemini are called what?

- a. Pollux and Castor
- b. Homer and Marge
- c. Zeus and Leda
- d. Aldebaran and Polaris

22. Stars with a higher magnitude number are brighter?

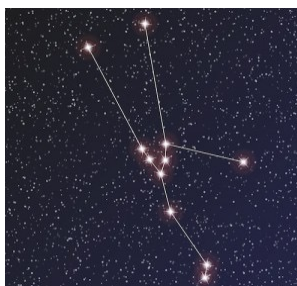
- a. True
- b. False

23. How many official constellation are there?

- a. 81
- b. 88
- c. 48
- d. 99

24. What is this constellation?

- a. Aries
- b. Taurus
- c. Gemini
- d. Capricornus

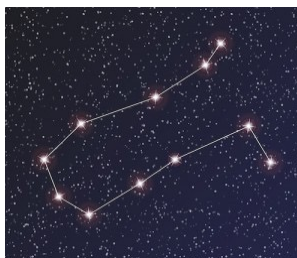


25. Vega, Deneb, and Altair are the three stars of the Summer Triangle

- a. True
- b. False

26. What is this constellation?

- a. Gemini
- b. Taurus
- c. Capricornus
- d. Aries

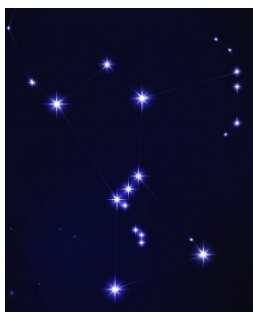


27. A formal group of stars that make a picture in the sky is called...

- a. A celestial sphere
- b. A constellation
- c. A celestial globe
- d. A comet

28. What is this constellation?

- a. Orpheus
- b. Orion
- c. Taurus
- d. Gemini



29. What is the first magnitude star in Pisces Austrinus?

- a. Fomalhaut
- b. Foreteller
- c. Fortune
- d. Fishmonger

30. Why won't you find the planets on a celestial sphere?

- a. Because the planets move in our sky in relation to the background stars
- b. Because planets are not stars, so astronomers aren't interested in them.
- c. Because celestial globe makers are lazy people
- d. Because the planets aren't bright enough to see in the sky

31. The Tropic of Cancer is...

- a. The latitude line in the northern hemisphere where the sun reaches the zenith on the winter solstice
- b. The latitude line in the southern hemisphere where the sun reaches the zenith on the summer solstice
- c. The latitude line in the northern hemisphere where the sun reaches the zenith on the summer solstice
- d. The latitude line in the southern hemisphere where the sun reaches the zenith on the winter solstice

32. The word "planet" comes from a phrase that means...

- a. Wandering star
- b. Revolving stars
- c. Celestial light
- d. Big ball of dirt

33. The brightest first magnitude star in Taurus is called what?

- a. Aldebaran
- b. Apis
- c. Castor
- d. Fomalhaut

34. What is the name of the Greek astronomer who made a catalogue of 48 constellations that became the basis for our constellations?

- a. Pegasus
- b. Poseidon
- c. Pandora
- d. Ptolemy

35. Looking down on the Earth at the North Pole, what direction does the Earth spin?

- a. Counterclockwise
- b. Clockwise

36. The line where sunlit half of the Earth touches the dark half is called the...

- a. Term Limit
- b. Terminator
- c. Terabyte
- d. Terrestrial Line

37. The Earth spins around on its...

- a. Axis
- b. Axiom
- c. Axle
- d. Axe

38. In astronomy, what does A.M. stand for?

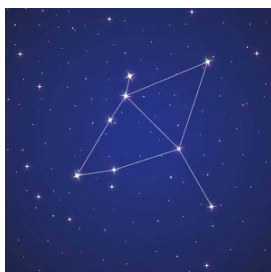
- a. Ante Meridiem
- b. Air Mass
- c. American Morning
- d. Amplitude Modulation

39. Which of these is not a reason why God created the lights in the sky?

- a. To be able to predict the future
- b. To separate the day from the night
- c. To give light on the earth
- d. To mark days and years
- e. To mark the seasons of life

40. What is this constellation?

- a. Hercules
- b. Cygnus
- c. Lyra
- d. Aquila



41. What is it called when a planet loops backward in its path through the background stars?

- a. Radical motion
- b. Recession motion
- c. Relative motion
- d. Retrograde motion

42. This thinker is credited with creating a mathematical model based on the geocentric model

- a. Aristotle
- b. Aristarchus
- c. Ptolemy
- d. Pythagoras

43. The ecliptic is...

- a. An eclipse of the sun
- b. The apparent path of the stars through the sky
- c. The apparent path of the sun through the sky
- d. The apparent path of the planet Saturn

44. What is polar night?

- a. When the sun sets on the winter solstice
- b. When polar bears hibernate
- c. When the sun rises in the middle of the night in the Arctic Circle
- d. When certain regions of the Earth experience over 24 hours where the sun doesn't rise

45. Polaris is known as...

- a. The North Star
- b. The South Star
- c. The biggest star
- d. The brightest star

46. Why do we see different constellations during different times of the year?

- a. Because of the Earth's rotation around the sun, the night side of the Earth faces different directions in space throughout the year
- b. Because the Earth spins on its axis, making some constellations brighter than others
- c. Because the stars turn off during the daytime
- d. Because the moon is too bright on certain nights to see the constellations of the Zodiac

47. Jupiter is the largest planet in the solar system.

- a. True
- b. False

48. The term "equinox" means...

- a. "Equal rights"
- b. "Equal night"
- c. "Equal day"
- d. "Equal knocks"

49. The point right over the head of an observer on the Earth is called...

- a. The Zero Point
- b. The Zenith
- c. The Zebra
- d. The Zealot

50. From the standpoint of an observer on Earth, the point where the sky meets the land or water is called...

- a. Twilight
- b. The celestial equator
- c. The terminator
- d. The horizon

51. What is this constellation?

- a. Pisces
- b. Perseus
- c. Pisces Austrinus
- d. Pegasus

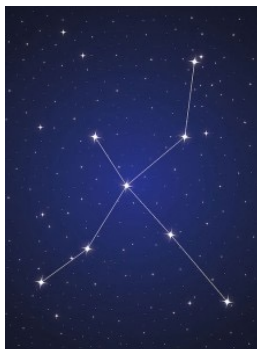


52. What impacts a star's apparent magnitude?

- a. Its absolute magnitude and its size
- b. Its absolute magnitude and its distance from us
- c. Its distance from us and its size
- d. Its absolute magnitude and how good our eyesight is

53. What is this constellation?

- a. Lyra
- b. Aquila
- c. Hercules
- d. Cygnus



54. The model of the universe where the Sun is at the center and everything else revolves around it is called...

- a. Lunarcentric
- b. Terrestrial
- c. Heliocentric
- d. Geocentric

55. What does the word "solstice" mean?

- a. "Sonny Bono and Cher"
- b. "Sun stands still"
- c. "Sun moves south"
- d. "Sun on the horizon"

56. The sun rises and sets on about the same place on the horizon every day of the year.

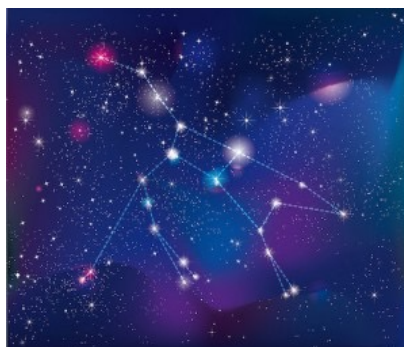
- a. True
- b. False

57. Why is the region north of the Arctic Circle known as the Land of the Midnight Sun?

- a. Because the sun never sets north of the Arctic Circle all year.
- b. Because the sun rises at midnight on the wintersolstice.
- c. Because on the summer solstice, these areas experience over 24 hours of daylight.
- d. Because at midnight, the sun sets.

58. What is this constellation?

- a. Cassiopeia
- b. Ursa Major
- c. Ursa Minor
- d. Andromeda



59. Jupiter is a terrestrial planet.

- a. True
- b. False

60. Polaris is in what constellation?

- a. Cassiopeia
- b. Ursa Major
- c. Ursa Minor
- d. The Big Dipper

61. The Temperate Zone in the northern hemisphere is...

- a. The region between the Tropics and the Arctic Circle
- b. The region that receives the least amount of sunlight
- c. The region that receives the most amount of sunlight
- d. The region where the sun reaches the zenith on the summer solstice

62. It takes longer for Saturn to go around the sun than for the Earth to go around the sun.

- a. True
- b. False

63. The model of the universe where the Earth is at the center and everything else revolves around it is called...

- a. Geocentric
- b. Heliocentric
- c. Lunarcentric
- d. Terrestrial

64. Saturn's largest moon is called what?

- a. Molech
- b. Titan
- c. Cronus
- d. Zeus

65. The line drawn from due south, straight over your head, and through due north is called...

- a. The Meridian
- b. The Mercury Line
- c. The Mermaid
- d. The Meropic Line

66. A group of stars that make a popular shape in the sky that isn't a constellation

- a. Asterism
- b. Astronomical Unit
- c. Asteroid
- d. Axis

Lesson 16: The Winter Constellations

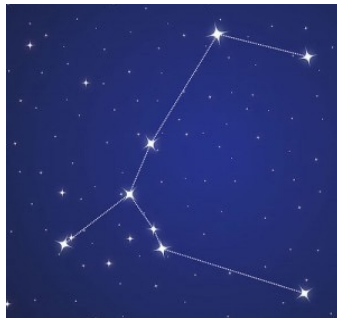
Circle the best answer for each question.

1. Amalthea the goat used its milk to nurse which god as a baby?

- a. Erichthonius
- b. Laelaps
- c. Zeus
- d. Orion

2. What is this constellation?

- a. Taurus
- b. Canis Minor
- c. Auriga
- d. Canis Major

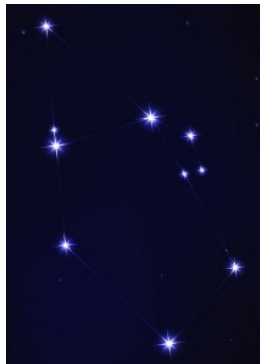


3. The Pleiades are never mentioned in the Bible.

- a. True
- b. False

4. What is this constellation?

- a. Canis Major
- b. Auriga
- c. Taurus
- d. Canis Minor



5. Capella is the brightest star in...

- a. Taurus
- b. Canis Minor
- c. Canis Major
- d. Auriga

6. Sirius has such a great apparent magnitude because...

- a. It is relatively bright on its own
- b. It is relatively close to the Earth
- c. Both of these together give it a great apparent magnitude

7. Procyon is the brightest star in this constellation...

- a. Auriga
- b. The Pleiades
- c. Canis Major
- d. Canis Minor

8. Erichthonius is the charioteer associated with which constellation?

- a. Auriga
- b. Canis Minor
- c. Orion
- d. Taurus

9. Sirius is the brightest star in this constellation...

- a. Canis Minor
- b. Canis Major
- c. Auriga
- d. Orion

10. When we say constellations like Orion or Taurus are “winter” constellations, this means...

- a. These constellation are never visible at all in the spring or fall.
- b. They have stars that are very cold.
- c. They are up near the meridian in the late evening in the winter months.
- d. These constellations are up in the sky at the same time as the Sun.

11. In Greek mythology, the Pleiades were...

- a. Little children who refused to do their chores
- b. The daughters of Atlas and Pleione
- c. Women who refused to share the secret of fire with human beings
- d. Women who fell in love with Agni, the god of fire

12. Who should have won in the story of the dog Laelaps and the Teumessian fox?

- a. Laelaps
- b. It is a paradox. There is no answer.
- c. The Teumessian fox
- d. Both

Lesson 17: Deeper Into Space (Part 1)

Circle the best answer for each question.

1. The largest moon of Neptune is called...

- a. Triton
- b. Titan
- c. Ganymede
- d. Herschel

2. Uranus' axis is tilted more than 90 degrees.

- a. True
- b. False

3. Who discovered the planet Uranus through his telescope?

- a. William Herschel
- b. Urbain Le Verrier
- c. John Couch Adams
- d. Johann Galle

4. Neptune was seen in a telescope and then afterwards confirmed mathematically.

- a. True
- b. False

5. Who mathematically discovered Neptune?

- a. Urbain Le Verrier
- b. King George III
- c. Johann Galle
- d. William Herschel

6. The edge of our sun's solar wind "bubble" is called...

- a. The heliograph
- b. The heliometer
- c. The heliopause
- d. The heliotrope

7. There are possibly oceans of liquid diamond on Uranus and Neptune.

- a. True
- b. False

8. Who was the first person to see any moons of Uranus?

- a. Galileo
- b. Johann Galle
- c. William Herschel
- d. Hipparchus

9. How many planets are in our solar system?

- a. 8
- b. 7
- c. 6
- d. 5

10. The Oort Cloud is...

- a. An belt of asteroids between the Earth and Mars
- b. A big storm on Uranus
- c. A big storm on Neptune
- d. A big belt of frozen particles out in space revolving around the Sun, far beyond Neptune

Lesson 18: Deeper Into Space (Part 2)

Circle the best answer for each question.

1. After a giant star expels its outer layers, it leaves behind a...

- a. Quasar
- b. Pulsar
- c. White Dwarf
- d. Red Dwarf

2. Once they reach the end of their lives, stars like our sun will first become...

- a. Giant stars
- b. Quasars
- c. Red Dwarves
- d. Supernova

3. The expelled outer layers of a star form what is called a...

- a. Ring Nebula
- b. Crab Nebula
- c. Planetary Nebula
- d. Pulsar

4. When neutron stars flash, it is called a...

- a. Crimson Comet
- b. Flash Gordon
- c. Lighthouse Star
- d. Pulsar

5. An explosion that destroys a star is called a...

- a. Supernova
- b. Nova
- c. Atomic Bomb
- d. Neutron Star

6. Most main sequence stars in our galaxy are...

- a. Red giants
- b. Red dwarves
- c. Bluegiants
- d. White dwarves

7. Most stars in the galaxy are...

- a. Main sequence stars
- b. Hypergiant stars
- c. Quasars
- d. Giant stars

8. All main sequence stars are generally the same color.

- a. True
- b. False

9. After a very large giant star explodes, what is left behind is called a...

- a. Black Dwarf
- b. Neutron Star
- c. Gimli the Dwarf
- d. Red Dwarf

10. The primary fuel of a star is...

- a. Gasoline
- b. Uranium
- c. Hydrogen
- d. Calories

11. The point at which light cannot escape a black hole is called...

- a. The Rubicon
- b. Match point
- c. The point of no return
- d. The event horizon

- 12. An explosion on the surface of a white dwarf after drawing material from a companion star is called a...**
- a. Neutron Star
 - b. Nova
 - c. Supernova
 - d. Quasar

Lesson 19: The Planet Mars

Circle the best answer for each question.

1. How did Aristotle know the moon was closer to the Earth than Mars?

- a. It was a random guess.
- b. Because Mars is red in color, indicating it is far away.
- c. Because Mars looked smaller in the sky.
- d. Because at times the Moon would cover Mars in the sky.

2. Mars is named after...

- a. The Roman god of war
- b. The true God
- c. The Greek god of peace
- d. The Babylonian god of war

3. It never gets above freezing temperatures on Mars.

- a. True
- b. False

4. Mars is what kind of planet?

- a. Ice giant
- b. Celestial
- c. Terrestrial
- d. Gas giant

5. In order from closest to the furthest from the sun, Mars is...

- a. The 2nd planet from the sun
- b. The 4th planet from the sun
- c. The 3rd planet from the sun
- d. The 5th planet from the sun

6. If you went to Mars, you would weigh more there than you do on Earth.

- a. True
- b. False

7. Mars' diameter and circumference are about half that of the Earth.

- a. True
- b. False

8. Mars' two moons are called...

- a. Phobos and Deimos
- b. Phoebe and Deity
- c. Phobia and Deist
- d. Phonics and Deictics

9. Mars' rotational period is...

- a. 6.5 hours
- b. 11.2 hours
- c. 34.6 hours
- d. 24.6 hours

10. Some day, it might be possible for human beings to travel to Mars.

- a. True
- b. False

11. Mars is inhabited with intelligent life.

- a. True
- b. False

12. Olympus Mons is the tallest mountain on Mars (and in the entire Solar system).

- a. True
- b. False

Lesson 20: Dwarf Planets and Asteroids

Circle the best answer for each question.

1. Asteroids are examples of...

- a. SSSBs
- b. Satellites
- c. Dwarf planets
- d. Planets

2. The main difference between an asteroid and a dwarf planet is...

- a. Dwarf planets like to travel with Elf planets
- b. Asteroids are in the Kuiper belt
- c. Dwarf planets are massive enough to be rounded by their own gravity.
- d. Asteroids are in the asteroid belt

3. Pluto and Charon orbit around a common...

- a. Barycenter
- b. Blackberry
- c. Barytone
- d. Berry bush

4. The moon is an example of...

- a. A satellite
- b. AnSSSB
- c. A dwarf planet
- d. A planet

5. The main difference between a planet and a dwarf planet is...

- a. Dwarf planets are all smaller than the moons of planets
- b. Planets are massive enough to be rounded by their own gravity
- c. Planets orbit the sun
- d. Planets have cleared their own neighborhood of other objects

6. The following is not a dwarf planet:

- a. Eris
- b. Haumea
- c. Mercury
- d. Pluto
- e. Makemake

7. A meteorite is...

- a. A space rock that lands on the Earth
- b. A space rock flying through space
- c. A space rock entering Earth's atmosphere
- d. A space rock that looks like meat

8. Most asteroids we know about live in the asteroid belt.

- a. True
- b. False

9. Earth is an example of...

- a. A satellite
- b. An SSSB
- c. A dwarf planet
- d. A planet

Lesson 21: Rising Stars

Circle the best answer for each question.

- 1. When a star or constellation first becomes visible on the eastern horizon for a brief moment just before sunrise, after a period of time when it had not been visible.**
 - a. Heliacal rising
 - b. Acronical rising

- 2. For the Aztecs, the acronical rising of the Pleiades every 52 years...**
 - a. Was the same night the Pleiades reached the meridian at midnight
 - b. Was the night of the New Fire ceremony
 - c. Was the night they believed the world could be destroyed
 - d. All of the above

- 3. The great Flood likely happened around the time of the acronical rising of the Pleiades.**
 - a. True
 - b. False

- 4. For the Egyptians, the heliacal rising of Sirius...**
 - a. Marked the seasonal rising of the Nile River
 - b. Marked the beginning of their new year festival
 - c. Came at the end of the “dog days of summer”
 - d. All of the above

- 5. When a star or constellation rises on the eastern horizon just as the sun is setting on the western horizon.**
 - a. Heliacal rising
 - b. Acronical rising

- 6. Earth is an example of...**
 - a. A satellite
 - b. An SSSB
 - c. A dwarf planet
 - d. A planet

- 7. The moon is an example of...**
 - a. A satellite

- b. An SSB
- c. A dwarf planet
- d. A planet

8. Asteroids are examples of...

- a. SSBs
- b. Satellites
- c. Dwarf planets
- d. Planets

9. How many planets are in our solar system?

- a. 8
- b. 7
- c. 6
- d. 5

Lesson 22: The Southern Constellations

Circle the best answer for each question.

1. You can find the general direction of the south celestial pole by drawing a line through...

- a. Gamma Crucis and Delta Crucis
- b. Gamma Crucis and Alpha Crucis
- c. Delta Crucis and Alpha Crucis
- d. Beta Crucis and Gamma Crucis

2. The closest star to our sun is...

- a. Gamma Crucis
- b. Alpha Centauri A
- c. Proxima Centauri
- d. Canopus

3. Alpha Centauri and Beta Centauri can be used as pointer stars to find...

- a. Canopus
- b. North
- c. The Southern Cross
- d. Centaurus

4. Canopus is the second brightest star in the night sky.

- a. True
- b. False

5. When a star or constellation revolves around a celestial pole and doesn't rise or set, it is...

- a. Circumnavigator
- b. Circumflex
- c. Circumpolar
- d. Circumlunar

6. Looking at the south celestial pole throughout the night, stars appear to move clockwise around it.

- a. True
- b. False

7. Canopus is a brightest star in...

- a. Crux
- b. Carina
- c. Capella
- d. Centaurus

8. Carina is Latin for...

- a. The poop deck of a ship
- b. The keel of a ship
- c. The sails of a ship
- d. A ship

9. Polaris is known as...

- a. The North Star
- b. The South Star
- c. The Biggest Star
- d. The Brightest Star

10. The celestial north pole is the location on the celestial sphere at which the Earth's north pole points.

- a. True
- b. False

Lesson 23: Axial Precession

Circle the best answer for each question.

1. The ecliptic pole...

- a. Is what the north celestial pole would be if the Earth had no tilt
- b. Is the middle point of the circle drawn by the Earth's axis during precession
- c. Is the point on the celestial sphere made by the line that runs perpendicular to the ecliptic line
- d. All of these

2. Because of axial precession, some day December will be a summer month.

- a. True
- b. False

3. The axis of the Earth stays tilted at about 23.5 degrees throughout its precession.

- a. True
- b. False

4. Why is Aries no longer the constellation associated with the vernal equinox?

- a. Because the Earth's axial precession has aligned the sun with another constellation.
- b. Because the Earth's revolution around the sun has changed.
- c. Because the Earth's rotation on its axis has slowed down.
- d. Because the Sun has gotten close to the Earth.

5. What star in Draco used to be the North Star?

- a. Thuban
- b. Thunder
- c. Thumper
- d. Thebes

6. What does the phrase "Age of Aquarius" refer to?

- a. A time when peace will guide the planets and love will steer the stars
- b. How old the constellation Aquarius is
- c. A time in ancient past when Aquarius was the sign associated with the fall equinox
- d. An astrological age when the sun will be in Aquarius at the vernal equinox (as a result of axial precession)

7. The Earth's axis will always point in the general direction of Polaris.

- a. True
- b. False

8. Draco will always be a circumpolar constellation.

- a. True
- b. False

9. How long does axial precession take?

- a. 3650 years
- b. 26,000 years
- c. 10,000 years
- d. 24 hours

Lesson 24: The Phases of the Moon

Circle the best answer for each question.

1. If you went out around sunset and saw this moon in the Eastern sky, you would know it was a...

- a. Waning Crescent Moon
- b. Waning Gibbous Moon
- c. Full Moon
- d. Waxing Gibbous Moon



2. If you went out around sunset and saw this moon near the western horizon, you would know it was a...

- a. Waning Crescent Moon
- b. Waxing Gibbous Moon
- c. Waxing Crescent Moon
- d. Full Moon



3. The moon is slightly closer to our eyes when on the horizon compared to when it is high in the sky. This is why it appears larger when it rises and sets.

- a. True
- b. False

4. When people talk about “the dark side of the moon”...

- a. They think it should only be played while watching The Wizard of Oz.
- b. They are talking about the half of the moon that is always lit up.
- c. They actually mean the far side of the moon.
- d. They are talking about the half of the moon that is always dark.

5. How long does it take for the moon to go through a complete cycle of phases?

- a. 27.3 days
- b. 14 days
- c. 29.5 days
- d. 24 hours

6. The far side of the moon has a lot of maria.

- a. True
- b. False

7. We can see more than 50% of the moon from the Earth.

- a. True
- b. False

8. The darker zones of the moon are called...

- a. Highlands
- b. Maria

9. This is a...

- a. New Moon
- b. Blood Moon
- c. Full Moon
- d. Blue Moon



10. If you went out around sunrise and saw this moon near the meridian, you would know it was a...

- a. Half Moon
- b. Full Moon
- c. Third Quarter Moon
- d. Waxing Gibbous Moon



11. Because of the moon's atmosphere, the moon's features are constantly changing.

- a. True
- b. False

12. The moon is not nearly as bright as the brightest stars.

- a. True
- b. False

13. The moon is the only natural satellite of the Earth.

- a. True
- b. False

Lesson 25: Exploration of the Moon

Circle the best answer for each question.

- 1. The U.S. President who promised to send a man to the moon and bring him back to Earth by the end of the 1960s**
 - a. Lyndon B. Johnson
 - b. John F. Kennedy
 - c. Richard Nixon
 - d. Ronald Reagan

- 2. What was the primary motivation behind the Space Race?**
 - a. The hope that some day we could leave planet Earth for good
 - b. The belief that being on the moon would be the greatest human achievement
 - c. The belief that the country with superior spaceflight technology must also have superior military technology
 - d. The desire to walk on Mars

- 3. NASA stands for...**
 - a. Need Another Seven Astronauts
 - b. National Aeronautics and Space Administration
 - c. Need Another Shuttle Also
 - d. National Astronaut's Space Alliance

- 4. Which nation was the first to send a man into space?**
 - a. The Soviet Union
 - b. Mexico
 - c. The United States
 - d. Canada

- 5. The two primary nations involved in the Space Race were...**
 - a. The United States and China
 - b. The Soviet Union and the United States
 - c. The Soviet Union and Mexico
 - d. The United States and Canada

6. How many men in the Apollo Program successfully walked on the moon?

- a. 10
- b. 12
- c. 6
- d. 2

7. The name of the first artificial satellite in space was...

- a. Sputnik 1
- b. Apollo 1
- c. Gemini 1
- d. Soyuz 1

8. The first manned mission to land on the moon was...

- a. Apollo 13
- b. Apollo 11
- c. Apollo 17
- d. Apollo 10

9. The first man in space was...

- a. Neil Armstrong
- b. John Glenn
- c. Yuri Gagarin
- d. Alan Shepard

10. The first man to walk on the moon was...

- a. Neil Armstrong
- b. Buzz Aldrin
- c. Gene Cernan
- d. Michael Collins

Lesson 26: The Biblical Calendar

Circle the best answer for each question.

1. The Hebrews use a...

- a. Lunisolar calendar
- b. Lunar calendar
- c. Old calendar
- d. Solar calendar

2. The Feast of Trumpets is on...

- a. The 1st day of the 1st month
- b. The last day of the 3rd month
- c. The 15th day of the 7th month
- d. The 1st day of the 7th month

3. Passover night, the moon is...

- a. Full
- b. Bright
- c. New
- d. Invisible

4. A new month on the Hebrew calendar begins on...

- a. The third quarter moon
- b. The full moon
- c. The first quarter moon
- d. The “new moon” (first sighting of a waxing crescent)

5. How long is 12 lunar months?

- a. 350 days
- b. 366 days
- c. 365 days
- d. 354 days

- 6. The cycle used by the Hebrews to line up their lunar months with the solar year is how long?**
- a. 21 years
 - b. 10 years
 - c. 5 years
 - d. 19 years
- 7. The cycle used by the Hebrews since the Babylonian exile for their calendar is called...**
- a. The MotorCycle
 - b. The MethodistCycle
 - c. The Metonic Cycle
 - d. The Meteor Cylce
- 8. On the Hebrew calendar, the 14th or 15th day of any month is always...**
- a. A first quarter moon
 - b. A new moon
 - c. A full moon
 - d. A third quarter moon
- 9. When the Hebrews add the month to their calendars, it is called...**
- a. An intergalactic month
 - b. An interchangeable month
 - c. An intercalary month
 - d. An interannual month
- 10. How long would your lunar months be if you were basing them off your first sighting of the waxing crescent moon?**
- a. 20-30 days
 - b. 28 days
 - c. 31 days
 - d. 29-30 days
- 11. The Feast of Firstfruits fell on...**
- a. The first day of the 7th month
 - b. The day after the Sabbath during the Feast of Unleavened Bread
 - c. 50 days after Passover
 - d. The 15th day of the 1st month

Lesson 27: The Modern Calendar

Circle the best answer for each question.

1. The Egyptian new year began...

- a. At the heliacal rising of Sirius
- b. After spring break
- c. On January 1
- d. At the first New Moon in spring

2. The Egyptian months were lunar months.

- a. True
- b. False

3. Countries that followed the Gregorian calendar used the abbreviation NS for their dates.

- a. True
- b. False

4. A solar year is exactly 365.25 days.

- a. True
- b. False

5. The earliest version of the Old Roman calendar...

- a. Had 12 months of equal length
- b. Had 12 lunar months
- c. Had 10 lunar months
- d. Had 12 months of unequal length

6. The Gregorian calendar removed 10 days from the 1582 calendar.

- a. True
- b. False

7. Julius Caesar renamed the month Quintilis after himself.

- a. True
- b. False

8. The Egyptians added a leap day once every four years.

- a. True
- b. False

9. Whose edict modified the Julian calendar in 1582?

- a. Pope Francis
- b. Pope Gregory XIII
- c. Pope Gregory I
- d. Pope John Paul II

10. In the Gregorian calendar, the year 2100 is a leap year.

- a. True
- b. False

11. Julius Caesar used the Egyptian idea of a leap day every 4 years in his calendar.

- a. True
- b. False

12. In the Gregorian calendar, the year 2000 is a leap year.

- a. True
- b. False

13. If we follow the Julian calendar rule of having a leap day every four years, this results in...

- a. Falling behind nearly 11 days every year
- b. A lot of people who hate that their birthday is on February 29
- c. Having about 3 extra days in the calendar every 400 years
- d. A perfect calendar system

Lesson 28: The Spring Constellations

Circle the best answer for each question.

1. What is this constellation?

- a. Libra
- b. Leo
- c. Boötes
- d. Virgo

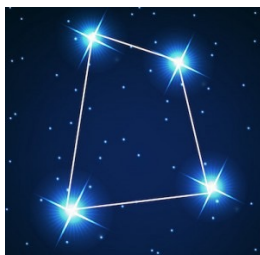


2. The brightest star in Boötes is called...

- a. Arcturus
- b. Romulus
- c. Spica
- d. Regulus

3. What is this constellation?

- a. Leo
- b. Virgo
- c. Corvus
- d. Libra



4. If I'm standing at 45° N Latitude and a particular star reaches my zenith, if I stand at 45° N Latitude on the other side of the world, the same star will also reach my zenith at some point.

- a. True
- b. False

5. The brightest star in Virgo is called...

- a. Polaris
- b. Regulus
- c. Arcturus
- d. Spica

6. The phrase “Follow the arc to Arcturus” is referring to...

- a. Noah’s Ark
- b. The arc of the Big Dipper’s handle
- c. The arc of Virgo’s leg
- d. The arc of the Little Dipper’s handle

7. What is this constellation?

- a. Leo
- b. Boötes
- c. Libra
- d. Virgo



8. Libra means...

- a. The scales
- b. The crow
- c. The virgin
- d. The plowman

9. The brightest star in Leo is...

- a. Regulus
- b. Spica
- c. Betelgeuse
- d. Arcturus

10. Virgo means...

- a. The scales
- b. The crow
- c. The virgin
- d. The lion

11. Corvus means...

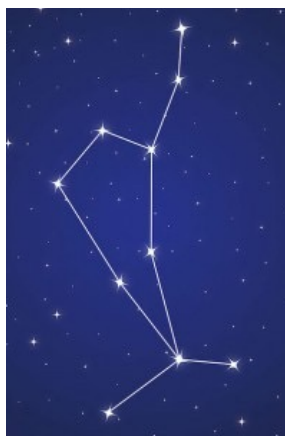
- a. The virgin
- b. The lion
- c. The plowman
- d. The crow

12. Leo means...

- a. The virgin
- b. The lion
- c. The plowman
- d. The crow

13. What is this constellation?

- a. Libra
- b. Boötes
- c. Corvus
- d. Virgo



14. Boötes means...

- a. The crow
- b. The plowman
- c. The virgin
- d. The lion

15. The phrase “Follow the spike to Spica” refers to...

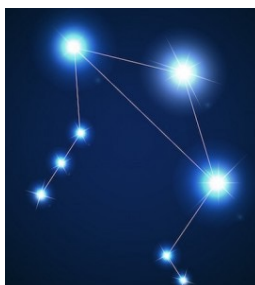
- a. The spike shape in the bright stars of Libra
- b. The spike shape in the bright stars of Leo
- c. The spike shape in the bright stars of Boötes
- d. The spike shape in the bright stars of Virgo

16. Why did Homer use the phrase “late-setting Boötes” in The Odyssey?

- a. Because at the time Odysseus was sailing, Boötes was out all night long and set in the early morning
- b. Because Boötes always sets late at night all year long
- c. Because people are always up late laughing at Boötes goofy name
- d. Because Boötes never sets

17. What is this constellation?

- a. Virgo
- b. Leo
- c. Boötes
- d. Libra



Lesson 29: The Planets Venus and Mercury

Circle the best answer for each question.

1. Venus is the hottest planet in the solar system.

- a. True
- b. False

2. Mercury's maximum elongation is...

- a. The longest distance Mercury can be from the Earth
- b. The largest distance Mercury can be from the sun in our sky
- c. The largest circumference Mercury can have
- d. The largest diameter Mercury can have

3. Venus is...

- a. Much bigger than the Earth
- b. Exactly the same size as the Earth
- c. Just slightly smaller than the Earth, but almost the same size
- d. Much smaller than the Earth

4. Mars is a superior planet to the Earth.

- a. True
- b. False

5. Venus is the third brightest regularly seen object in the sky, behind the sun and the moon.

- a. True
- b. False

6. It takes longer for Venus to spin on its own axis than it does for it to go around the sun.

- a. True
- b. False

7. The 584-day period it takes Venus to appear in the same place in our sky, relative to the sun is called its...

- a. Synodic Period
- b. Rotational Period
- c. Radical Period
- d. Orbital Period

8. Venus can often be seen in the middle of the night.

- a. True
- b. False

9. Uranus is an inferior planet to the Earth.

- a. True
- b. False

10. Venus is so hot because of the...

- a. Gaslight effect
- b. Garfield effect
- c. Greenhouse effect
- d. G-force effect

11. At most Venus sets more than 3 hours after sunset or never rises more than 3 hours before sunrise.

- a. True
- b. False

12. Venus is an inferior planet to the Earth.

- a. True
- b. False

13. Venus is sometimes called...

- a. The morningstar
- b. The evening star
- c. Earth's twin
- d. All of these

Lesson 30: Comets and Meteor Showers

Circle the best answer for each question.

- 1. Short period comets take less than how many years to complete their orbits?**
 - a. 2
 - b. 2000
 - c. 20
 - d. 200

- 2. When comets get to the region of the inner planets, the gaseous atmosphere that appears around them is called a...**
 - a. Coma
 - b. Comb
 - c. Comic
 - d. Compost

- 3. Comets have nearly perfect circular orbits.**
 - a. True
 - b. False

- 4. Comet can often be seen with two tails.**
 - a. True
 - b. False

- 5. The radiant for the Orionids is...**
 - a. The constellation Perseus
 - b. The constellation Gemini
 - c. The constellation Orion
 - d. The constellation Lyra

- 6. What comet reappears every 75-76 years?**
 - a. The Great Comet of 1882
 - b. Comet Hale-Bopp
 - c. Comet Thatcher
 - d. Halley's Comet

7. Meteor showers are the result of...

- a. Stars falling from the sky.
- b. The Earth not having enough meteorites on it.
- c. Meteors falling when it is also raining.
- d. The Earth moving through the debris field of a comet or another object.

8. Halley-type comets have orbits lasting 20 to _____ years to complete?

- a. 2000
- b. 200
- c. 22
- d. 2

9. Jupiter-family comets take less than how many years to complete their orbits?

- a. 20
- b. 200
- c. 2000
- d. 2

10. Comets are an type of...

- a. Small Solar System Body (SSSB)
- b. Dwarf Planet
- c. Planet
- d. Satellite

11. Meteor showers are best observed...

- a. Right after sunset.
- b. Right after sunrise
- c. In the morning before the twilight of dawn.
- d. At noon.

Lesson 31: Lunar Eclipses

Circle the best answer for each question.

1. P1 is when...

- a. The edge of the moon first touches the penumbra
- b. The moon enters totality
- c. The edge of the moon completely leaves the penumbra
- d. The edge of the moon first touches the umbra

2. When the moon completely enters the Earth's umbra, this is what kind of eclipse?

- a. Total
- b. Penumbral
- c. Complete
- d. Partial

3. When the moon only touches the Earth's penumbra but not the umbra, this is called a...

- a. Solar Eclipse
- b. Partial Eclipse
- c. Penumbral Eclipse
- d. Total Eclipse

4. A lunar eclipse happens about once a month.

- a. True
- b. False

5. When the moon touches the Earth's umbra but isn't completely covered by it, this is called a...

- a. Solar Eclipse
- b. Partial Eclipse
- c. Penumbral Eclipse
- d. Total Eclipse

6. P4 is when...

- a. The moment of totality
- b. The edge of the moon leaves the umbra
- c. The edge of the moon first touches the umbra
- d. The edge of the moon leaves the penumbra

7. What phase of the moon must a lunar eclipse take place?

- a. First Quarter
- b. Third Quarter
- c. New Moon
- d. Full Moon

8. U2 is when...

- a. The edge of the moon leaves the umbra
- b. The edge of the moon leaves the penumbra
- c. Totality ends
- d. Totality begins

9. U4 is when...

- a. The edge of the moon first touches the umbra
- b. The edge of of the moon leaves the penumbra
- c. The moment totality ends
- d. The edge of the moon leaves the umbra

10. When an eclipsed moon looks red, this is called...

- a. A harvest moon
- b. A supermoon
- c. A blood moon
- d. A red moon

Lesson 32: Solar Eclipses

Circle the best answer for each question.

1. Most solar eclipses last at least an hour.

- a. True
- b. False

2. The atmosphere of plasma that surrounds the sun is called...

- a. Annular
- b. Eclipse
- c. Glow
- d. Corona

3. The moon's path around the Earth is elliptical.

- a. True
- b. False

4. The mysterious darkness during Jesus' crucifixion was not a solar eclipse. We know this because...

- a. Solar eclipses are visible worldwide, but the crucifixion darkness was only visible in Israel.
- b. Solar eclipses happen every month, but the crucifixion darkness was seen as a special event.
- c. Solar eclipses usually last hours, but the crucifixion darkness lasted only a few minutes.
- d. Solar eclipses only happen during the New Moon, and Jesus died near the Full Moon of Passover.

5. When the moon completely enters the disk of the sun but doesn't cover it completely, this is called...

- a. An annular eclipse
- b. A lunar eclipse
- c. A partial eclipse
- d. A total eclipse

6. When in the penumbra of the moon's shadow, the sun is...

- a. Partially eclipsed
- b. Totally eclipsed

7. The umbra of the moon's shadow during a solar eclipse can sometimes cover the whole Earth.

- a. True
- b. False

8. Many ancient cultures believed an eclipse was caused by a creature stealing or devouring the sun.

- a. True
- b. False

9. It isn't important to have protective eyewear while watching an eclipse.

- a. True
- b. False

10. The time when the moon completely covers the disk of the sun is called...

- a. Annular
- b. Corona
- c. Dark Time
- d. Totality

11. A solar eclipse can only take place during a...

- a. First Quarter Moon
- b. Full Moon
- c. New Moon
- d. Third Quarter Moon

Lesson 33: The Zodiac (Part 3)

Circle the best answer for each question.

1. Which is the right order of the Zodiac constellations?

- a. Aries, Taurus, Gemini, Capricornus, Leo, Virgo, Libra, Scorpius, Sagittarius, Cancer, Aquarius, Pisces
- b. Aquarius, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aries, Pisces
- c. Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Sagittarius, Scorpius, Capricornus, Aquarius, Pisces
- d. Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aquarius, Pisces

2. At the summer solstice, the sun reaches the zenith for those on the Tropic of Cancer.

- a. True
- b. False

3. How many constellations are part of the Zodiac?

- a. 10
- b. 15
- c. 14
- d. 12

4. Which constellation represents a crab?

- a. Sagittarius
- b. Virgo
- c. Cancer
- d. Capricornus

5. The brightest star in Scorpius is called...

- a. Arcturus
- b. Altair
- c. Antares
- d. Aldebaran

6. Which of these was not a Royal Star of Persia?

- a. Regulus
- b. Antares
- c. Aldebaran
- d. Vega

7. Which constellation represents scales?

- a. Sagittarius
- b. Leo
- c. Scorpius
- d. Libra

8. The sun is in each zodiac constellation for the same amount of time.

- a. True
- b. False

9. Why are the zodiac constellations special?

- a. Because they touch the ecliptic
- b. Because they help me read my horoscope
- c. Because they are brighter than other constellations
- d. Because they are easier to find than other constellations

10. Which constellation can be seen directly beside the center of the Milky Way Galaxy?

- a. Sagittarius
- b. Taurus
- c. Scorpius
- d. Cancer

11. Which constellation contains the teapot asterism?

- a. Scorpius
- b. Cancer
- c. Sagittarius
- d. Ursa Major

12. Which constellation begins the traditional list of Zodiac constellations?

- a. Aries
- b. Capricornus
- c. Taurus
- d. Gemini

Lesson 35: Final Exam

Circle the best answer for each question.

NOTE: Diagrams for the constellations (questions 1-30) can be found at the the end of this quiz.

1. Constellation A

- a. Cygnus
- b. Aquila
- c. Sirius
- d. Cassiopeia

2. Constellation B

- a. Lyra
- b. Cygnus
- c. Deneb
- d. Libra

3. Constellation C

- a. Capricornus
- b. Cygnus
- c. Hercules
- d. Altair

4. Constellation D

- a. Cygnus
- b. Aquila
- c. Lyra
- d. Aldebaran

5. Constellation E

- a. Cancer
- b. Sagittarius
- c. Capricornus
- d. Cygnus

6. Constellation F

- a. Scorpius
- b. Cygnus
- c. Sagittarius
- d. Sirius

7. Constellation G

- a. Andromeda
- b. Taurus
- c. Aries
- d. Aquila

8. Constellation H

- a. Piscis Austrinus
- b. Pegasus
- c. Perseus
- d. Pisces

9. Constellation I

- a. Aquila
- b. Andromeda
- c. Aries
- d. Canis Minor

10. Constellation J

- a. Pisces
- b. Piscis Austrinus
- c. Taurus
- d. Perseus

11. Constellation K

- a. Andromeda
- b. Ursa Major
- c. Aquila
- d. Aquarius

12. Constellation L

- a. Perseus
- b. Pollux
- c. Pisces
- d. Piscis Austrinus

13. Constellation M

- a. Aquila
- b. Auriga
- c. Aquarius
- d. Arcturus

14. Asterism N

- a. Square of Pegasus
- b. Pisces
- c. Pleiades
- d. Teapot of Sagittarius

15. Constellation O

- a. Canis Major
- b. Cancer
- c. Taurus
- d. Andromeda

16. Constellation P

- a. Gemini
- b. Pleiades
- c. Castor
- d. Auriga

17. Constellation Q

- a. Capella
- b. Capricornus
- c. Cancer
- d. Castor

18. Constellation R

- a. Capricornus
- b. Canis Major
- c. Cancer
- d. Canis Minor

19. Constellation S

- a. Orion
- b. Pegasus
- c. Perseus
- d. Taurus

20. Constellation T

- a. Canis Minor
- b. Cygnus
- c. Canis Major
- d. Capricornus

21. Constellation U

- a. Corvus
- b. Virgo
- c. Boötes
- d. Arcturus

22. Constellation V

- a. Virgo
- b. Sagittarius
- c. Leo
- d. Scorpius

23. Constellation W

- a. Cancer
- b. Libra
- c. Virgo
- d. Leo

24. Constellation X

- a. Virgo
- b. Spica
- c. Boötes
- d. Cancer

25. Constellation Y

- a. Virgo
- b. Leo
- c. Libra
- d. Capricornus

26. Constellation Z

- a. Cygnus
- b. Capricornus
- c. Corvus
- d. Cancer

27. Constellation AA

- a. Cassiopeia
- b. Cancer
- c. Corvus
- d. Capricornus

28. Constellation BB

- a. Draco
- b. Cassiopeia
- c. Ursa Major
- d. Ursa Minor

29. Constellation CC

- a. Sagittarius
- b. Draco
- c. Ursa Major
- d. Scorpius

30. Constellation DD

- a. Canis Major
- b. Canis Minor
- c. Ursa Major
- d. Ursa Minor

31. Brightest star in Boötes

- a. Antares
- b. Aldebaran
- c. Altair
- d. Arcturus

32. Brightest star in Canis Major

- a. Spica
- b. Procyon
- c. Sirius
- d. Polaris

33. Brightest star in Lyra

- a. Vega
- b. Antares
- c. Arcturus
- d. Virgo

34. Brightest star in Auriga

- a. Sirius
- b. Castor
- c. Capella
- d. Cygnus

35. Two brightest stars in Orion

- a. Rigel and Vega
- b. Procyon and Betelgeuse
- c. Regulus and Betelgeuse
- d. Rigel and Betelgeuse

36. Brightest star in Canis Minor

- a. Polaris
- b. Pollux
- c. Procyon
- d. Sirius

37. Brightest star in Aquila

- a. Vega
- b. Aldebaran
- c. Altair
- d. Deneb

38. Brightest star in Taurus

- a. Altair
- b. Auriga
- c. Aldebaran
- d. Antares

39. Brightest star in Scorpius

- a. Aldebaran
- b. Antares
- c. Altair
- d. Arcturus

40. Brightest star in Virgo

- a. Spica
- b. Arcturus
- c. Regulus
- d. Sirius

41. Two brightest stars in Gemini

- a. Pollux and Cygnus
- b. Pollux and Castor
- c. Procyon and Capella
- d. Pollux and Capella

42. Brightest star in Piscis Austrinus

- a. Regulus
- b. Arcturus
- c. Fomalhaut
- d. Spica

43. Brightest star in Cygnus

- a. Deneb
- b. Fomalhaut
- c. Vega
- d. Altair

44. Brightest star in Leo

- a. Spica
- b. Rigel
- c. Polaris
- d. Regulus

45. The north pole star is called

- a. Procyon
- b. Polaris
- c. Pisces
- d. Pollux

46. The constellation Orion is mentioned in what passage

- a. Job 9:4-10
- b. Job 38:31-33
- c. Amos 5:8
- d. All of these

47. In what passage of Scripture does God promise Abraham he will have descendants that number the stars in the sky?

- a. Psalm 19:1-6
- b. Genesis 1:14-19
- c. Deuteronomy 4:19
- d. Genesis 15:1-6

48. The Pleiades is mentioned in what passage of Scripture?

- a. Genesis 1:14-19
- b. Psalm 19:1-6
- c. Job 9:4-10
- d. Deuteronomy 4:19

49. The path the sun takes through the celestial sphere is called...

- a. The ecliptic
- b. The celestial equator
- c. The celestial pole
- d. The meridian

50. Which of the following is not a reason why God gave us the sun, moon, and stars?

- a. For marking the seasons (our yearly rhythms of life like planting, harvesting, and festivals)
- b. To separate day and night;
- c. For marking days and years (that is, making calendars)
- d. To give us light
- e. For making signs or constellations in the sky (useful for navigation).
- f. To help us predict the future

51. What comes after Aries in the 12 zodiac constellations?

- a. Leo
- b. Capricornus
- c. Taurus
- d. Gemini

52. What comes after Cancer in the 12 zodiac constellations?

- a. Sagittarius
- b. Libra
- c. Scorpius
- d. Leo

53. What comes after Libra in the 12 zodiac constellations?

- a. Pisces
- b. Sagittarius
- c. Virgo
- d. Scorpius

54. What comes after Sagittarius in the 12 zodiac constellations?

- a. Gemini
- b. Cancer
- c. Aquarius
- d. Capricornus

55. When standing on the equator, Ursa Major is a circumpolar constellation.

- a. True
- b. False

56. If you traveled to the southern hemisphere and watched the stars around the celestial pole all night long, the stars would look they they are spinning around the pole...

- a. Clockwise
- b. Counterclockwise

57. Looking down on the north pole, the Earth spins...

- a. Counterclockwise
- b. Clockwise

58. Ursa Majoris...

- a. An asterism
- b. A constellation

59. The Summer Triangle is...

- a. A constellation
- b. An asterism

60. Ancient people considered Neptune a planet.

- a. True
- b. False

61. Ancient people considered Earth a planet.

- a. True
- b. False

62. When a star rises as the sun is setting, reaching the meridian at high midnight, this is the star's...

- a. Lunar rising
- b. Heliacal rising
- c. Acronical rising
- d. Solar rising

63. In 13,000 years, the Earth's axis will still be pointing toward Polaris.

- a. True
- b. False

64. What is the only superior terrestrial planet?

- a. Mars
- b. Pluto
- c. Earth
- d. Venus

65. What planet comes right after Saturn in the solar system?

- a. Neptune
- b. Mars
- c. Pluto
- d. Uranus

66. What are the two ice giant planets?

- a. Pluto and Neptune
- b. Mercury and Venus
- c. Jupiter and Saturn
- d. Uranus and Neptune

67. The asteroid belt is between...

- a. Mars and Jupiter
- b. Neptune and the Kuiper Belt
- c. Jupiter and Saturn
- d. Venus and Earth

68. The Kuiper belt is located...

- a. Between Neptune and Pluto
- b. Beyond the orbit of Neptune
- c. Between Venus and Earth
- d. Between Mars and Jupiter

69. A dwarf planet...

- a. Is a satellite going around a planet
- b. Is a small solar system body
- c. Has not cleared its own neighborhood of other bodies
- d. Is not rounded by its own gravity

70. If you found a chunk of space rock on the ground, it would be a...

- a. Meteor
- b. Meteoroid
- c. Meteor shower
- d. Meteorite

71. When Venus is at maximum elongation, its position is closest to the sun that it will ever get.

- a. True
- b. False

72. Total lunar eclipses happen only during...

- a. The new moon
- b. The waxing crescent moon
- c. The half moon
- d. The full moon

73. A partial lunar eclipse is when...

- a. The moon enters part of the Earth's umbra
- b. The moon enters the Earth's shadow but only for part of the night
- c. The moon enters all of the Earth's umbra
- d. The moon enters part of the Earth's penumbra but not the umbra

74. When the moon completely covers the disk of the sun, this is called...

- a. An annular solar eclipse
- b. A total lunar eclipse
- c. A partial solar eclipse
- d. A total solar eclipse

75. The moon takes how many days to go through all its phases?

- a. 28.5
- b. 30
- c. 29.5
- d. 26.5

76. What phase of the moon is this?

- a. New Moon
- b. Waning Crescent
- c. Waxing Crescent
- d. Waning Crescent



77. What phase of the moon is this?

- a. Waning Crescent
- b. First Quarter
- c. Waning Crescent
- d. Waxing Crescent



78. What phase of the moon is this?

- a. Waning Full
- b. Waxing Gibbous
- c. Waning Gibbous
- d. Half Moon



79. If you saw this third quarter moon setting on the western horizon, you would know the sun should be...

- a. Just getting ready to rise
- b. Just getting ready to set
- c. At the meridian
- d. Directly below your feet on the other side of the world



80. The Hebrews use a...

- a. Solar calendar
- b. Lunisolar calendar
- c. Mayan calendar
- d. Lunar calendar

81. The idea for a leap year every 4 years came from...

- a. The Romans
- b. The Egyptians
- c. The Pope
- d. The Greeks

82. In the Metonic cycle, there should be an intercalary month added how many times in a 19-year cycle?

- a. 10
- b. 7
- c. 12
- d. 5

83. Pope Gregory XIII changed the rules of leap years. What is different compared to the Julian calendar?

- a. 3 leap days are skipped every 400 years.
- b. There are 3 extra leap days added every 400 years.
- c. There are only leap years when the year is divisible by 400.
- d. There are no leap days on years divisible by 100.

