

1. Choose the answer that best completes the bridge map in the photo.

- A one hour; one year
- B one month; one day
- C one year; one day
- D one day; one year

Fill in the following bridge map:
Relating Factor: $\frac{\text{Earth's Revolution}}{\text{Earth's Rotation}}$
Amount of time for one ?

2. If a planet doesn't have seasons, what can you conclude about the planet?

- A It isn't tilted.
- B It has the same elevation.
- C It's distance from the sun does not change.
- D It does not revolve.

3. June 21st is the _____.

- A Summer Equinox
- B Vernal Equinox
- C Autumnal Solstice
- D Summer Solstice

4. The _____ model is incorrect because it says that the EARTH is the center of the universe.

- A heliocentric
- B geocentric
- C egocentric
- D Copernicus

5. According to the Big Bang Theory, how old is our universe?

- A 14 million years old
- B 14 trillion years old
- C 140,000 years old
- D 14 billion years old

6. What is the name of our galaxy?

- A Andromeda
- B Milky Way
- C LMC
- D Tadpole Galaxy

7. What is the SHAPE of our galaxy?

- A elliptical
- B spiral
- C irregular
- D cube

8. Where are we located in our galaxy?

- A On an outer band, away from the center
- B Directly the center
- C Near the middle in the black hole

9. Which answer correctly lists planets in order, starting with the one closest to the sun? (All planets may not be included)

- A Mars, Venus, Mercury, Earth, Neptune, Saturn, Uranus, Jupiter
- B Mercury, Venus, Earth, Mars, Saturn, Uranus, Jupiter, Neptune
- C Mercury, Venus, Earth, Mars, Jupiter, Saturn, Neptune
- D Mercury, Earth, Jupiter, Saturn, Neptune, Venus, Mars

10. What two forces allow the planets to stay in their orbit?

- A Gravity, Friction
- B Friction, Inertia
- C Wind, Gravity
- D Inertia, Gravity

11. Largest planet (with Great Red Spot)

- A Neptune
- B Mars
- C Jupiter
- D Mercury

12. Blue-Green and tilted on its side

- A Neptune
- B Mars
- C Venus
- D Uranus

13. Second-largest planet, known for its rings.

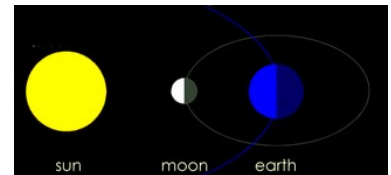
- A Saturn
- B Mercury
- C Venus
- D Jupiter

14. What three characteristics describe the inner planets?

- A terrestrial (rocky) surface, no atmosphere, larger than outer planets
- B smaller than outer planets, iron core, terrestrial (rocky) surfaces
- C rings, larger than outer planets, iron core
- D rings, terrestrial, contain multiple craters

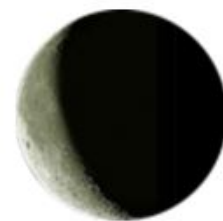
15. What phase of the moon would you see on Earth? (see photo)

- A full moon
- B new moon
- C first quarter
- D third quarter



16. What phase of the moon is this?

- A waning crescent
- B half
- C full
- D new
- E waxing crescent
- F waxing gibbous



17. What type of eclipse is seen when a new moon moves in front of the sun (like in the picture)?

- A solar eclipse
- B lunar eclipse



18. A “dirty snowball” with a large tail (from melted ice)

- A asteroid
- B meteor
- C comet
- D crater

19. Created when a large meteorite hits the ground

- A asteroid
- B meteor
- C comet
- D crater

20. Another name for a “shooting star” (forms when rocks from space burn up in our atmosphere)

- A asteroid
- B meteor
- C comet
- D crater

21. Found in a belt between Mars and Jupiter

- A asteroid
- B meteorite
- C comet
- D crater

22. What does the Big Bang Theory state about our universe?

- A There was a big explosion caused by a war
- B There was a big explosion and everything was immediately put into place and has not moved since
- C There was a big explosion, and it's still expanding today
- D Two galaxies collided and caused a big bang

23. Which planet is also believed that it may be able to support life?

- A Mars
- B Venus
- C Jupiter
- D Mercury

24. If the moon is getting brighter each night, we call it a _____ moon.

- A waxing
- B waning

25. Why is Venus sometimes called "Earth's Twin?"

- A Venus rotates in the same direction.
- B Venus's air has the same gases.
- C Venus is of similar size and density.
- D Venus is the same color.

26. What type of galaxy is being shown in the picture? How old would this galaxy be?

- A Elliptical, young
- B Elliptical, old
- C Irregular, young
- D Irregular, old
- E Spiral, middle-aged
- F Spiral, young



27. Is it safe to look at a lunar eclipse? Why or why not?

- A Yes, because the moon is blocking the sun
- B Yes, because you are looking at the moon
- C No, because you are looking at the sun
- D No, because although the moon is blocking the sun, it isn't fully blocked

28. What phase of the moon occurs during a solar eclipse

- A New moon
- B Full Moon
- C Waxing crescent
- D Waning crescent

29. What phase of the moon occurs during a lunar eclipse?

- A New moon
- B Full moon
- C Waxing gibbous
- D Waning gibbous

30. Why do we see different phases of the moon?

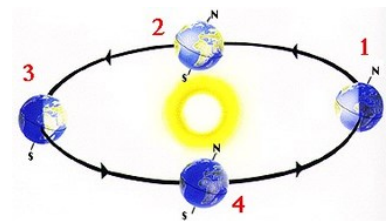
- A Because of the Moon's tilt
- B Because of the Earth's atmosphere
- C Because of the Earth's rotation
- D Because of the Moon's revolution

31. Half of the moon is always lit

- A True
- B False

32. Why does the Northern Hemisphere have summer at point 2 and winter at point 4?

- A Because at point 2 it is closer to the sun and point 4 is further away
- B Because at point 2 the Northern Hemisphere receives more direct sunlight than point 4
- C Because at point 4 the Northern Hemisphere receives more direct sunlight than point 2
- D The Northern Hemisphere does not have summer at point 2 and winter at point 4



33. Why is it that we have solstices/equinoxes?

- A We have solstices because in the Spring and Fall we have unequal times that the Sun is in the sky due to the Earth's tilt
- B We have equinoxes because in the Spring and Fall we have unequal times that the Sun is in the sky due to the Earth's tilt
- C We have solstices because in the Summer and Winter we have unequal times that the Sun is in the sky due to the Earth's tilt
- D We have solstices because in the Summer and Winter we have equal times that the Sun is in the sky due to the Earth's tilt

34. A student witnesses an object in the sky and describes it as having a lit tail following it. The student then goes outside the next night and sees it again, only a little further in the sky. What most likely is this object?

- A A meteorite because they burn up in the atmosphere
- B A meteor because they burn up in the atmosphere
- C A comet because they stay in the sky for long periods of time
- D An asteroid because they travel in the asteroid belt

35. A space rock makes its way starting from in between Mars and Jupiter, near Earth, to Earth's atmosphere, then finally Earth's ground. What is the order in which this rock changes its classification?

- A Asteroid, Meteorite, Meteor, Meteoroid
- B Asteroid, Meteor, Meteoroid, Meteorite
- C Asteroid, Meteoroid, Meteor, Meteorite
- D Meteorite, Meteor, Meteoroid, Asteroid

36. If you traveled to a planet that had MORE gravity than Earth, how would your weight and mass change?

- A Weight would increase, mass would increase
- B Weight would increase, mass would decrease
- C Weight would increase, mass would stay the same
- D Weight would decrease, mass would increase
- E Weight would decrease, mass would decrease
- F Weight would stay the same, mass would increase

37. What causes Earth to have seasons?

- A The Earth's rotation
- B The Earth's revolution
- C The Earth's distance from the Sun
- D The Earth's tilt

38. (Check all that apply) Why could we not survive on Jupiter

- A It has a big red storm that is bigger than Earth
- B It doesn't have a rocky surface
- C It is too close to the sun
- D It doesn't have a moon

39. Why isn't the heliocentric theory completely correct?

- A It states that the Earth is in the center of the solar system
- B It states that the Sun is in the center of the solar system
- C It states that all the orbits are circular
- D It states that there are no stars

40. Which answer has the objects in order from BIGGEST to SMALLEST?

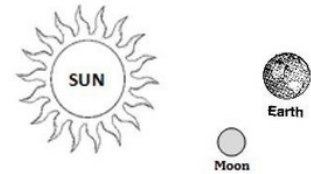
- A Solar System, Galaxy, Universe, Little you
- B Galaxy, Solar System, Universe, Little you
- C Universe, Galaxy, Solar System, Little you
- D Universe, Solar System, Galaxy, Little you

41. What would happen to the planets if there were no inertia, but only gravity acting on the planets?

- A Planets would not orbit but would move toward the Sun
- B Planets would fly out of orbit in a straight line
- C Planets would spin in circles where they are and never move from this position
- D Planets location and motion would not change

42. The Earth, Moon, and the Sun are aligned as shown. Which moon phase would you seen from the Earth?

- A Gibbous Moon
- B Crescent Moon
- C Waning Moon
- D New Moon



43. If there is a New Moon at midnight on October 1st, when would the next New Moon occur?

- A October 8
- B October 16
- C October 30
- D October 1 a year later

44. During which portion of Earth's revolution around the sun is the northern hemisphere tilted toward the sun?

- A vernal equinox
- B summer solstice
- C autumnal equinox
- D winter solstice

45. What happens during a total solar eclipse

- A The shadow of Earth falls on the moon
- B The moon completely covers the sun's light
- C Part of the sun shows through
- D The moon is about the same size as the sun

46. What happens during a total lunar eclipse

- A The shadow of Earth falls on the moon
- B The moon completely covers the sun's light
- C Part of the sun shows through
- D The moon is about the same size as the sun

47. Why do planets or moons with atmospheres have fewer impacts?

- A The air slows and burns up small objects
- B Fewer objects orbit near these planets
- C Most impacts occur in remote areas
- D Erosion erases the features of most craters