

Name_____

Teacher_____

Period_____

ALIEN RESCUE SCIENCE TEST

TEST YOUR KNOWLEDGE

Circle the letter of the correct answer.

1. Which of these worlds is a planet (not a moon)?
 - A. Io
 - B. Phobos
 - C. Uranus
 - D. Not sure
2. Which of these worlds is a gas giant?
 - A. Saturn
 - B. Earth
 - C. Pluto
 - D. Not sure
3. Which of the following worlds is a moon of Jupiter?
 - A. Europa
 - B. Mars
 - C. Neptune
 - D. Not sure
4. Which of these worlds is farther from the sun than Saturn?
 - A. Earth's moon
 - B. Mercury
 - C. Charon
 - D. Not sure
5. Venus
 - A. is a gas giant
 - B. has an atmosphere denser than Earth's
 - C. is very cold because of a greenhouse effect
 - D. Not sure

6. Io

- A. is the closest planet to the sun
- B. has active volcanoes
- C. is colder than Pluto
- D. Not sure

7. Which of these worlds has the lowest surface gravity?

- A. Earth
- B. Triton
- C. Jupiter
- D. Not sure

8. What is the difference between a moon and a planet?

- A. moons are closer to the sun than planets
- B. planets have plant life and moons do not
- C. moons orbit planets but planets do not orbit moons
- D. Not sure

9. Which of the following does an atmosphere do for a world?

- A. causes volcanoes to erupt
- B. pushes heat out into space so the world doesn't get too hot
- C. protects it from meteors
- D. Not sure

10. Which of the following does a magnetic field do for a world?

- A. protects it from the solar wind
- B. lowers its temperature
- C. gives it seasons
- D. Not sure

11. Craters are caused by
- A. earthquakes
 - B. magnetic fields
 - C. meteor impacts
 - D. Not sure
12. You are standing on the surface of a world and see the sun in the sky. The rest of the sky is black and you can see stars. What do you know about that world?
- A. It is a gas giant.
 - B. It has no atmosphere.
 - C. It has no magnetic field.
 - D. Not sure
13. Which of the following is **NOT** the name of a temperature scale?
- A. Fahrenheit
 - B. Titan
 - C. Celsius
 - D. Not sure
14. Ice
- A. can be made of many substances, not just water
 - B. covers most of the surface of Io
 - C. is an element
 - D. Not sure
15. Which of these instruments can be used to learn about temperature on a world?
- A. seismograph
 - B. infrared camera
 - C. spectrograph
 - D. Not sure
16. Imagine that you need to determine whether or not a moon's surface has carbon. What instrument would you use?
- A. wide angle camera
 - B. spectrograph
 - C. seismograph
 - D. Not sure

17. Scientists want to measure the pressure of Mars' atmosphere. What instrument would they use?

- A. barometer
- B. thermometer
- C. magnetometer
- D. Not sure

18. Suppose that you want to take closeup pictures of features on the surface of Callisto, but you can only afford to send an orbiter. What instrument would you include?

- A. infrared camera
- B. narrow angle camera
- C. barometer
- D. Not sure

19. You need to design a probe to go to Titan to find out if it has a magnetic field or earthquakes. Which of the following would you choose to include on your probe?

- A. a battery and a solar panel
- B. a barometer and a seismograph
- C. a magnetometer and a seismograph
- D. Not sure

20. Scientists want to gain more accurate information about the atmosphere of Venus, especially what it's made of. What type of probe would they use and what instrument would they include?

- A. an orbiter with an infrared camera
- B. a flyby with a seismograph
- C. a lander with a barometer
- D. not sure

21. At a temperature of absolute zero

- A. water melts
- B. atoms stop moving
- C. carbon changes from a liquid to a solid
- D. not sure

22. Water boils at which of the following temperatures? (Remember to think about the different temperature scales.)

- A. 32 degrees C
- B. 100 degrees C
- C. 100 degrees F
- D. Not sure

23. Which of these could be considered a "signature" for an element?

- A. a seismograph
- B. an infrared picture
- C. a spectrum
- D. not sure

24. A world will have a magnetic field if

- A. it has a thick atmosphere
- B. it has liquid water
- C. it has a core made of liquid metal
- D. not sure