National Research Foundation

SAASTA
South African Agency for Science
and Technology Advancement

ASTRO™ QUIZ 2019

## ROUND 1

## SCHOOL NAME:

Please answer your questions on this question paper. Each question is followed by possible answers marked $A$, $\mathrm{B}, \mathrm{C}$ and D or just A and B . Only one answer is correct. Choose the most correct answer and circle it clearly.

1. Which is the nearest star to Earth?
A. Betelgeuze
B. Proxima Centauri
C. The Sun
D. Alpha Centauri
2. How hot is the core of the Sun?
A. About 5500 degrees Celsius
B. About 800000 degrees Celsius
C. About 16 million degrees Celsius
D. About 30 million degrees Celsius
3. From where does the Sun get its energy?
A. Fusion of hydrogen into helium
B. Burning coal
C. By shrinking
D. By reflecting light received from the planets
4. Which parts of the Sun are visible only during a solar eclipse?
A. Photosphere and chromosphere
B. Chromosphere and corona
C. Convective zone and corona
D. Convective zone and chromosphere
5. The planets are almost on a line in the sky. This is because...
A. they all are more or less in the same plane
B. they are more or less the same size
C. they are more or less randomly located in the sky
D. they all have more or less the same speed
6. On which planet can you have a birthday more than once in a day?
A. Mercury
B. Venus
C. Mars
D. Jupiter
7. Which is the hottest planet in the solar system?
A. Mercury
B. Mars
C. Venus
D. Earth
8. Why is the planet mentioned above the hottest?
A. It is the closest planet to the Sun
B. It has many volcanoes
C. It suffers from a greenhouse effect
D. It is being pulled by the Sun
9. Which is the largest rocky planet in the solar system?
A. Earth
B. Venus
C. Jupiter
D. Saturn
10. Mars is a red planet because there is lots of rust on its surface.
A. True
B. False
11. Which planet has the shortest day?
A. Mercury
B. Earth
C. Jupiter
D. Uranus
12. How many Earths could you fit into Jupiter?
A. About 1
B. About 10
C. About 460
D. About 1300
13. Which is the largest Moon in the solar system?
A. Titan
B. Europa
C. Our Moon
D. Ganymede
14. Around which planet does this moon revolve?
A. Mercury
B. Earth
C. Jupiter
D. Uranus
15. What are Saturn's rings made of?
A. Water, ice, dust and rocks
B. Small planets
C. Hydrogen and helium
D. Pieces of carbon
16. Who discovered four moons of Jupiter?
A. Isaac Newton
B. Galileo Galilei
C. William Herschel
D. John Herschel
17. Approximately, how far away from Earth is the Moon on average?
A. 384000 km
B. 406000 km
C. 781000 km
D. 974000 km
18. The Moon has an atmosphere in which astronauts can breathe
A. True
B. False
19. We always see the same side of the Moon because it is not rotating.
A. True
B. False
20. Stars shine/appear only during the night.
A. True
B. False
21. Who was the first human on the Moon?
A. Neil Armstrong
B. Buzz Aldrin
C. James Lovell
D. Michael Collins
22. Which is the brightest star in the night sky?
A. The Sun
B. Aldebaran
C. Betelgeuse
D. Sirius
23. If the Sun, Moon and Earth were moving in the same plane, there would be a lunar eclipse every month.
A. True
B. False
24. Which was South Africa's first satellite?
A. SumbandilaSat
B. SUNSAT
C. Explorer
D. ZACube-1
25. You can see a full Moon at noon.
A. True
B. False
26. Comets are lumps of ice rock that orbit the Sun closer than Mercury.
A. True
B. False
27. Different planets take different amounts of time to make one complete rotation on their axis and so they have different lengths of days. Arranged from longest to shortest time, which of the following is correct?
A. Venus, Mars, Mercury, Earth
B. Mercury, Venus, Mars, Earth
C. Mercury, Mars, Venus, Earth
D. Venus, Mercury, Mars, Earth
28. Different planets take different amounts of time to make one complete revolution around the Sun. Arranged from shortest to longest time, which of the following is correct?
A. Earth, Mars, Uranus, Neptune
B. Earth, Uranus, Mars, Neptune
C. Neptune, Uranus, Mars, Earth
D. Uranus, Earth, Mars, Neptune
29. The period that the Earth takes to revolve once around the Sun is approximately a $\qquad$
A. year
B. month
C. week
D. day
30. Daytime is longer in the summer because the Earth spins more slowly in the summer months.
A. True
B. False
