

ASTRO™ QUIZ 2019

ROUND 2

SCHOOL NAME:

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

1. **Which was the first asteroid to be discovered?**
 - A. Vesta
 - B. Juno
 - C. Pallas
 - D. Ceres
2. **Which of the following is not a dwarf planet?**
 - A. Hyakutake
 - B. Pluto
 - C. Haumea
 - D. Makemake
3. **Tswaing is a 1 km crater made by an asteroid impact about 200000 years ago. How big was the asteroid?**
 - A. About 1 metre
 - B. About 60 metres
 - C. About 400 metres
 - D. About 1 kilometre
4. **The Sun is much further from the Earth than the Moon. Hence ...**
 - A. There are solar and lunar eclipses
 - B. Solar eclipses can only be seen in the northern hemisphere
 - C. A solar eclipse can only be seen in a small area on Earth
 - D. It gets dark during a solar eclipse
5. **How many antennas does MeerKAT have?**
 - A. 48
 - B. 64
 - C. 91
 - D. 117
6. **For a telescope, a good observing site should be _____**
 - A. A place with good weather throughout the year
 - B. High up and have a stable atmosphere above it
 - C. Away from towns
 - D. All of the above
7. **SALT's main mirror consists of 91 small mirrors, as you cannot produce a single mirror with its size.**
 - A. True
 - B. False
8. **How many hexagonal mirrors does SALT's main mirror consist of?**
 - A. 1
 - B. 52
 - C. 91
 - D. 117
9. **The largest verified impact crater on Earth is the Tswaing crater.**
 - A. True
 - B. False
10. **The space mission with the first Moon landing was ...**
 - A. Apollo 9
 - B. Apollo 10
 - C. Apollo 11
 - D. Apollo 12
11. **Which space mission almost ended in disaster because of an oxygen tank explosion?**
 - A. Apollo 13
 - B. Apollo 14
 - C. Apollo 15
 - D. Apollo 16

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12. This year in July marked the _____ year since man landed on the Moon.

- A. 10th
- B. 20th
- C. 35th
- D. 50th

13. On the Moon, one of the astronauts of the Apollo 15 mission let a hammer and feather fall. Which of the following is true?

- A. Neither the hammer nor the feather reached the ground.
- B. The hammer reached the ground first.
- C. The feather reached the ground first.
- D. The hammer and the feather reached the ground at the same time.

14. Why is it spring in New York when it is autumn in Johannesburg?

- A. Because New York is in the northern hemisphere and Johannesburg is in the southern hemisphere
- B. Because New York is to the west of the meridian and Johannesburg is to the east of it
- C. Because Johannesburg is higher above sea level than New York
- D. Because of the greenhouse effect

15. Laika was ...

- A. The first dog in space
- B. The first ape in space
- C. The first dog on the Moon
- D. The first ape on the Moon

16. Who was the first South African to travel to space?

- A. Elon Musk
- B. Tim Noakes
- C. Mark Shuttleworth
- D. Conrad Koch

17. When did the person mentioned above travel to space?

- A. 1967
- B. 1969
- C. 2002
- D. 2009

18. To where in space exactly, did the person mentioned above travel?

- A. Mars
- B. Moon
- C. the International Space Station
- D. Pluto

19. The image below shows star trails at a location. Where is that location?



- A. The North Pole
- B. The equator
- C. Cape Town
- D. You cannot tell from the picture

20. What we usually refer to as shooting stars are actually ...

- A. Meteoroids
- B. Meteors
- C. Meteorites
- D. None of the above

21. Looking at the picture below, which of the following is true?



- A. Star A is hotter than star B
- B. Star A is cooler than star B.
- C. Stars A and B have the same temperature.
- D. One cannot tell from the image which star is hotter.

22. Our Milky way belongs to the _____

- A. Andromeda Nebula
- B. Jewel Box
- C. Coalsack
- D. Local Group

23. Which country launched the first man-made satellite?

- A. Soviet Union
- B. USA
- C. Germany
- D. South Africa

- 24. Which observatory will celebrate its 200th anniversary in 2020?**
A. Boyden Observatory (Bloemfontein)
B. Union Observatory (Johannesburg)
C. Lesedi (Sutherland)
D. South African Astronomical Observatory (Cape Town)
- 25. Which of the following is false?**
A. The Space Shuttle was first launched in 1981.
B. The Space Shuttle was last launched in 2012.
C. The Space Shuttle was reusable.
D. Two Space Shuttles were lost due to accidents
- 26. The Hubble Space Telescope is less than a thousand kilometres away from the earth.**
A. True
B. False
- 27. When did South Africa launch its first satellite?**
A. 1990
B. 1999
C. 2008
D. 2018
- 28. What is the name of the first South African satellite?**
A. Sputnik
B. Soyuz
C. Sunsat
D. Sumbandila
- 29. When did South Africa establish its space agency?**
A. 2009
B. 2010
C. 2011
D. 2012
- 30. Johannes Kepler used circular orbits to explain the motion of the planets.**
A. True
B. False

TIE BREAKER QUESTIONS

- 1. Stars and planets are born from ...**
A. Other stars
B. Cloud of gas and dust
C. Cloud of gas
D. Rocks
- 2. Which planet comes closest to the earth as it revolves around the sun?**
A. Jupiter
B. Mars
C. Venus
D. Pluto
- 3. Where are most of the asteroids found in the solar system?**
A. Everywhere in the solar system
B. Between mars and Jupiter
C. The Kuiper Belt
D. In orbit around the earth
- 4. Which of the following is the site of an impact crater created when an asteroid hit the earth in South Africa?**
A. Vredefort
B. Tswaing
C. A and B
D. None of the above
- 5. How many moons do Mars have?**
A. 1
B. 2
C. 3
D. None of above
- 6. A star with small mass will die as a neutron star.**
A. True
B. False
- 7. If you want to leave the Earth's gravity, at what minimum speed should you travel?**
A. 11 km/s
B. 10 km/s
C. speed of light
D. speed of sound
- 8. Which South African satellite(s) has/have been launched to space?**
A. Sumbandila,
B. Sunsat
C. A and B above
D. Soyuz

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9. The diameter of the solar system is approximately

- A. 120,000 million km
- B. 12,000 million km
- C. 1.2 million km
- D. 150,000 million km

10. The seasons on earth occur because ...

- A. the earth moves closer and away from the sun in a year
- B. the sun gets bigger and smaller in a year
- C. the earth's rotation axis is tilted with respect to its orbital plane
- D. the earth's orbit is too elliptical

Thank you for participating.