ONTARIO EARTH AND SPACE SCIENCE, GRADE 12, UNIVERSITY PREPARATION (SES4U) · UNIT B

Planetary Science — Practice Test

Ontario Earth and Space Science, Grade 12, University Preparation (SES4U) • 25 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The terrestrial planets are Mercury, Venus, Earth, and**

A Jupiter

B Neptune

C Mars

D Saturn

Understand It with Pulse | Flag a mistake

2 **The gas giants are Jupiter, Saturn, Uranus, and**

A Mercury

B Neptune

C Venus

D Mars

Understand It with Pulse | Flag a mistake

3 **Terrestrial planets are mainly composed of rock and metal, while gas giants are mainly composed of**

A Hydrogen and helium

B Iron only

C Rock only

D Ice only

Understand It with Pulse | Flag a mistake

4 **Venus has a very hot surface mainly because of a runaway**

A Ice cap

B Magnetic field

C Greenhouse effect

D Volcanic winter

Understand It with Pulse | Flag a mistake

5 **Mars appears red because its surface contains iron**

A Carbonate

B Metal only

C Oxide

D Sulfide

Understand It with Pulse | Flag a mistake

6 **The largest planet in the solar system is**

A Neptune

B Saturn

C Jupiter

D Uranus

Understand It with Pulse | Flag a mistake

7 **Saturn rings are made mainly of**

A Water ice particles

B Gas

C Rock only

D Metal sheets

Understand It with Pulse | Flag a mistake

8 **The asteroid belt lies between the orbits of Mars and**

A Venus

B Saturn

C Jupiter

D Earth

Understand It with Pulse | Flag a mistake

9 **Dwarf planets include Pluto, Eris, Haumea, and**

A Titan

B Makemake

C Europa

D Ganymede

Understand It with Pulse | Flag a mistake

10 **Pluto was reclassified as a dwarf planet mainly because it has not cleared its orbital**

A Moons

B Atmosphere

C Path

D Neighbourhood

Understand It with Pulse | Flag a mistake

11 **The Kuiper belt is a region beyond Neptune containing icy bodies, including**

A Mars

B Pluto

C Titan

D Asteroids only

Understand It with Pulse | Flag a mistake

12 **The Oort cloud is a distant spherical region thought to be the source of long period**

A Comets

B Asteroids

C Planets

D Meteors only

Understand It with Pulse | Flag a mistake

13 **Earth atmosphere protects life by absorbing harmful ultraviolet radiation in the**

A Ionosphere only

B Troposphere

C Ozone layer

D Exosphere

Understand It with Pulse | Flag a mistake

14 **Earth magnetic field is generated mainly in its liquid outer**

A Crust

B Mantle

C Core

D Atmosphere

Understand It with Pulse | Flag a mistake

15 **The changing phases seen in the night sky are caused by changing relative positions of the Sun, Earth, and**

A Mars

B Venus

C Jupiter

D Moon

Understand It with Pulse | Flag a mistake

16 **Tides on Earth are caused mainly by the gravitational pull of the**

A Mars

B Moon

C Jupiter

D Sun only

Understand It with Pulse | Flag a mistake

17 **A spring tide occurs when the Sun, Moon, and Earth are**

A At right angles

B Farthest apart

C Aligned

D Opposite in seasons

Understand It with Pulse | Flag a mistake

18 **The greenhouse effect warms Earth because greenhouse gases absorb outgoing**

A Visible light

B Sound

C Infrared radiation

D Ultraviolet only

Understand It with Pulse | Flag a mistake

19 **Which planet has the most extreme temperature difference between day and night due to almost no atmosphere**

A Venus

B Mars

C Earth

D Mercury

Understand It with Pulse | Flag a mistake

20 **Jupiter Great Red Spot is a long lived**

A Volcano

B Impact crater

C Ocean

D Storm

Understand It with Pulse | Flag a mistake

21 **Titan, a moon of Saturn, is notable for its thick atmosphere and lakes of liquid**

A Ammonia

B Methane

C Water

D Carbon dioxide

Understand It with Pulse | Flag a mistake

22 **Europa, a moon of Jupiter, is of interest because it may have a subsurface ocean of liquid**

A Sulfur

B Nitrogen

C Water

D Methane

Understand It with Pulse | Flag a mistake

23 **Exoplanets are planets orbiting stars other than the**

A Galaxy centre

B Earth

C Moon

D Sun

Understand It with Pulse | Flag a mistake

24 **The transit method detects exoplanets by a periodic dip in a stars**

A Brightness

B Colour only

C Temperature

D Mass

Understand It with Pulse | Flag a mistake

25 **The radial velocity method detects exoplanets by periodic shifts in a stars**

A Temperature

B Spectrum due to wobble

C Size

D Brightness

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	C	**10.**	D	**19.**	D
2.	B	**11.**	B	**20.**	D
3.	A	**12.**	A	**21.**	B
4.	C	**13.**	C	**22.**	C
5.	C	**14.**	C	**23.**	D
6.	C	**15.**	D	**24.**	A
7.	A	**16.**	B	**25.**	B
8.	C	**17.**	C		
9.	B	**18.**	C		

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