

CHAPTER 10

SPACE EXPLORATION

- 1 Banyak teori tentang penerbangan ke angkasa lepas telah dilakukan oleh ahli-ahli sains antara tahun 1 600 hingga 1 900. / Many theories about aviation in space have been carried out by the scientists between 1 600 to 1 900. **TP2**



Claudius Ptolemy – He suggested that the _____ was the _____ of the Solar System.



Ptolemy (90 – 168 after century)

- _____ model.
- The _____ is at the centre of the Solar System.
- Other planets include the Sun orbiting around the Earth in a _____ orbit.





Nicolaus Copernicus – He is the 'Father of Modern Astronomy' who claimed that the Sun was the centre of the Solar System and the _____ orbited the _____.

Copernicus (1473 – 1543)

- _____ model.
- The _____ is at the centre of the Solar System.
- The Earth rotates on the axis around the _____ in a _____ orbit.

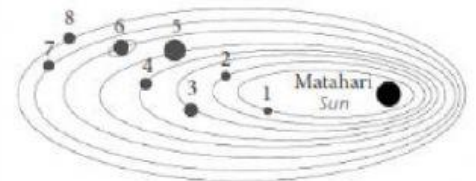




Johannes Kepler - He has made similarities to planets and satellites orbiting and moving in the _____ orbit.

Kepler (1571 – 1630)

- Modified _____ model.
- The Sun is the _____ point of the Solar System.
- The planets orbiting the Sun in _____ orbits.



- | | |
|--------------------|----------------------|
| 1 Utarid / Mercury | 5 Musytari / Jupiter |
| 2 Zuhrah / Venus | 6 Zuhal / Saturn |
| 3 Bumi / Earth | 7 Uranus / Uranus |
| 4 Mars / Mars | 8 Neptun / Neptune |

- 1 Berikut merupakan teknologi digunakan dalam astronomi. Namakan teknologi-teknologi tersebut dan bincangkan fungsi mereka dengan mengisi tempat kosong.

The following are technology used in astronomy. Name the technologies and discuss their functions by filling in the blanks. **TP4**

Radar
Radar

Teleskop angkasa
Space telescope

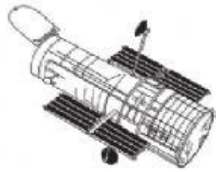
Teleskop pembiasan
Refracting telescope



Name: _____

Fungsi:
Function:

To _____ distance objects in space



Name: _____

Fungsi:
Function:

To detect _____ emitted from objects in space



Name: _____

Fungsi:
Function:

To receive _____ from satellite and space telescope

- 2 (a) Penerokaan angkasa lepas hanya terjadi dengan penciptaan kapal angkasa. Namakan kapal angkasa berikut berdasarkan kegunaan mereka. Pilih jawapan anda daripada kata-kata yang diberi di bawah.
Space exploration is only possible with the invention of spacecrafts. Name the spacecrafts below based on their functions. Choose your answers from the words provided below.

Roket
Rocket

Kapal angkasa ulang-alik
Space shuttle

Prob angkasa
Space probe

Satelit buatan
Man-made-satellite

Stesen angkasa lepas
Space station



Kegunaan: / Uses:

Satelit buatan manusia mengelilingi Bumi dan digunakan untuk pelbagai tujuan

Man-made-satellites revolve around the Earth and are used for various purposes

1

Name: _____



Name: _____

Kegunaan: / Uses:

A spacecraft that can be reused for transporting astronauts and equipment, and launching satellites to their orbits



Name: _____

Kegunaan: / Uses:

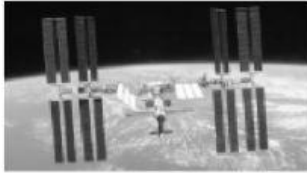
*Melancarkan satelit dan kapal angkasa lain ke angkasa lepas
Launching satellites and other spacecraft to the outer space*



Kegunaan: / Uses:

Unmanned spacecraft or robot sent out to collect data from the outer space

Name: _____



Kegunaan: / Uses:

A station for astronauts to carry out scientific investigation in outer space for a long period of time

Name: _____