CHAPTER 10

SPACE EXPLORATION

LIVEWORKSHEETS

Perkembangan dalam Penerokaan Angkasa Lepas
Developments in Space Exploration

Rujuk buku teks muka surat 270
Refer textbook page 270

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.*

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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.*

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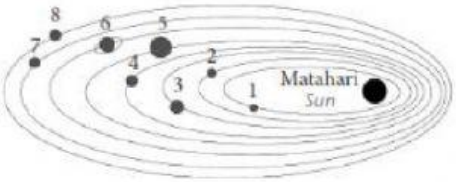
Johannes Kepler *- He has made similarities to planets and satellites orbiting and moving in the _____ orbit.*

Kepler (1571 – 1630)

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



1 Utarid / *Mercury*
2 Zuhrah / *Venus*
3 Bumi / *Earth*
5 Musytari / *Jupiter*
6 Zuhal / *Saturn*
7 Uranus / *Uranus*

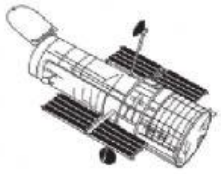
LIVEWORKSHEETS

Teknologi yang Digunakan dalam Astronomi dan Penerokaan Angkasa Lepas / *Technology used in Astronomy and Space Exploration*

Rujuk buku teks muka surat 274
Refer textbook page 274

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	Teleskop angkasa	Teleskop pembiasan
Radar	*Space telescope*	*Refracting telescope*

 Name: _____	**Fungsi:** ***Function:*** *To* _____ *distance objects in space*
 *Name:* _____	**Fungsi:** ***Function:*** *To detect* _____ *emitted from objects in space*

LIVEWORKSHEETS

Name: _____

Fungsi:
Function:

To receive _____ from satellite and space telescope

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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*

 Name: _____	**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*

LIVEWORKSHEETS

 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*

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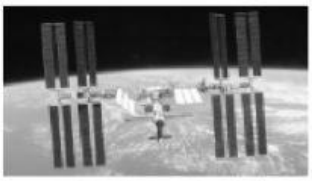
 Name: _____	**Kegunaan: / *Uses:*** *Unmanned spacecraft or robot sent out to collect data from the outer space*
 Name: _____	**Kegunaan: / *Uses:*** *A station for astronauts to carry out scientific investigation in outer space for a long period of time*

LIVEWORKSHEETS