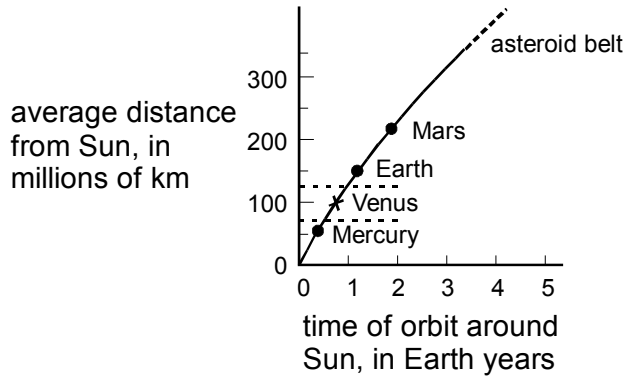


Level 5 answers

1. (a) Jupiter 1
 (b) (i) • dot at (1,150) *the dot must be vertically above 1 year the label Earth is not required for the mark* 1

the Earth takes 1 year to orbit the Sun 1
 accept 'it is 150 million km from the Sun'

- (ii) x cross at (0.6, 110) *accept a cross on the curve between 75 and 125 million km from the Sun the label Venus is not required for the mark* 1



- (c) Iris, because it takes longest *both the asteroid and the reason are required for the mark do not accept 'Iris because it's 5.51'* 1

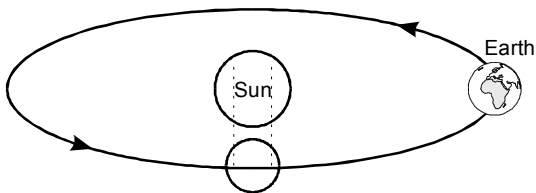
[5]

2. (a) (i) any **one** from
 • Mercury
 • Venus 1
 (ii) any **one** from
 • Mars
 • Jupiter
 • Saturn
 • Uranus
 • Neptune
 • Pluto 1

- (b) any **one** from 1
 • the Earth spins **or** turns **or** rotates *do not accept 'the Earth rotates round the Sun'*

- the Earth goes round on its axis *do not accept 'the Earth goes round'*

- (c) (i) the Earth is drawn on its orbit, with its centre between the limits shown 1



- (ii) 9 months is of an orbit *accept '9 months is of a year' or 'it takes 3 months to go of an orbit' accept 'it takes one year to go all the way round' providing the Earth is drawn in the correct position in part (i)* 1

[5]

3. (a) they reflect **or** scatter light *accept 'light reflects off it'
or 'light reflects on it'
do **not** accept 'light reflects onto it'
or 'light shines on them'* 1
- from the Sun 1
- (b) it goes into the shadow of the Earth *accept 'it is eclipsed' or 'it is not in the
sunlight' or 'it is no longer reflecting the
sunlight'
accept 'it goes into the shadow of the
Moon' or 'it goes in front of the Moon'
do **not** accept 'it goes behind the Moon'
or 'the Moon gets in the way'
or 'the satellite tumbles'* 1
- (c) any **one** from 1
- weather forecasting
 - navigation **or** position finding
 - communications
- accept 'satellite TV' or 'TV' or 'telephone'
or 'radio'*
- astronomy **or** looking at the stars
 - to take pictures of the Earth
- accept 'spying' or 'surveillance' or 'to see
changes in the environment or in land-use'
accept 'for defence' or 'as weapons'*
- [4]
4. (a) any **one** from 1
- Mercury
 - Venus
 - Earth
- (b) it rotates on its axis *accept 'it spins' or 'it turns on its axis'
or 'it rotates' or 'it turns'
accept 'it spins as it goes round the Sun'
do **not** accept 'it spins and it goes
round the Sun'
do **not** accept 'it goes round or
moves round'* 1
- (c) its axis is tilted *accept 'sometimes one pole is closer to the
Sun and sometimes the other is' or
'sometimes one pole is in daylight'* 1
- [3]
5. (a) horizontal arrow pointing to the left *the arrow may be drawn anywhere
on the diagram* 1
- (b) towards the South ✓ *if more than one box is ticked,
award no mark* 1
- (c) any **one** from 1
- the part of the shadow which passes over
Padstow is narrower
 - the part of the shadow which passes over
Falmouth is wider **or** bigger

(d) any **one** from

-
-

the Moon moves around the Earth
the Earth spins on its axis
*accept 'the Earth turns **or** rotates **or** goes round'*

*do **not** accept 'the Earth moves around the Sun 'or 'the Earth moves' or 'the Sun moves'*

1

[4]