

Quiz Key

1) Solution:

Explanation:

Mercury is the planet that is closest to the Sun.

Then comes Venus, which is the second closest planet to the Sun, then Earth, which is the third closest planet to the Sun.

Mercury's distance from the Sun ranges from 46 million km to 69.8 million km.

The planet was most likely given its name because it travels so fast across space.

Mercury's temperature changes are the most dramatic in the solar system, ranging from 90 K to 700 K.

After Earth, Mercury is the densest significant planet in the solar system.

Final Answer:

The correct option is C i.e Mercury.

2) Solution:

Explanation:

Standard Meridian is a meridian which is used to determine standard time.

The time of a place depends on the longitude that passes through it. Therefore, the standard time for each country is usually taken as the time of the central meridian that passes through it

India has a vast longitudinal extent. Since many meridians pass through india,

Then it is important to adopt the local time of one central meridian of a country as the standard time for the country.

Thus, we need a standard meridian for India.

Final Answer:

We need a standard meridian for India because to adopt the local time of one central meridian of a country as the standard time for the country.

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3) Solution:

Explanation:

The sun rises two hours earlier in Arunachal Pradesh as compared to Gujarat in the west. But the clocks show the same time this happens because:

- i) The longitudinal gap between Arunachal Pradesh and Gujarat is about 30.
- ii) Due to this, there is time lag of about two hours between these states.
- iii) Since Arunachal Pradesh is in the east, the sun rises earlier here compared to Gujarat.
- iv) The Indian Standard Time is taken from the time of Standard Meridian of India and hence, the watches show the same time in both the states.

Final Answer:

As the longitudinal gap between Arunachal Pradesh and Gujarat is about 30 degrees, the time lag between these two states is two hours. Since Arunachal Pradesh is situated in the east, the sun rises earlier here compared to Gujarat in the west. But the watch shows the same time because of the Standard Meridian of India.

4) Solution:

Explanation:

The threshold frequency is the minimum frequency below which no photons are emitted.

The amount of least energy which is required to emit an electron from the surface is called the work function.

Final answer:

The threshold frequency is the minimum frequency below which no photons are emitted.

The amount of least energy which is required to emit an electron from the surface is called the work function.

5) Correct Answer

Galaxy

6) Correct Answer

spiral shape

7) Correct Answer

Star

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8) Correct Answer

Comet

9) Correct Answer

an asteroid

10) Correct Answer

800 Million kilometers