

長文 4 択問題の解法 (3)

書かれていることを正確に読む！

◆ 次の英文を読んで、設問の解答として最も適当なものを、(A)～(D)の中から選びなさい。(218 words)

【1998 早大・人科】

What determines the average temperature of the Earth? The amount of heat trickling up from the center of the Earth is negligible compared with the amount falling down on the Earth's surface from the Sun. Indeed, if the Sun were turned off, the temperature of the Earth would fall so far that the air would freeze solid, and the planet would be covered with a layer of nitrogen and oxygen snow 10 meters thick. Well, we know how much sunlight is falling on the Earth and warming it.

The amount of sunlight absorbed by the Earth has to equal on average the amount of energy radiated back to space. We don't ordinarily think of the Earth as radiating into space, and when we fly over it at night we don't see it glowing in the dark (except for cities). But that's because we're looking in ordinary visible light. If we were to look beyond red light into what is called the thermal infrared part of the spectrum at 20 times the wavelength of yellow light, for example, we would see the Earth glowing in its own eerie, cool infrared light, more in the Sahara than Antarctica, more in daytime than at night. The more energy coming in from the Sun, the more the Earth radiates back to space.

<問題>

1. What determines the Earth's temperature?

- (A) The Earth's own heat coming from inside
- (B) Heated gasses in the Earth's atmosphere
- (C) Layers of clouds covering the Earth
- (D) Sunlight falling on the surface of the Earth

2. What would become of the Earth without sunlight?

- (A) All the air would be gone from the Earth.
- (B) A frozen layer of gasses would cover the Earth.
- (C) All the water would go deep under the ground.
- (D) Eruptions would occur everywhere on Earth.

3. How does the Earth radiate into space?

- (A) It radiates only when the Sun is bright.
- (B) It radiates all the time night and day.
- (C) It radiates least in extremely hot regions.
- (D) It radiates part of the energy absorbed.

<解法：Scanning ⇒ 消去法> 本文を巧みに言い換えた選択肢表現にまどわされるな！

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- (A) The Earth's own heat coming from inside (B) Heated gasses in the Earth's atmosphere
(C) Layers of clouds covering the Earth (D) **Sunlight falling on the surface of the Earth**

<該当箇所：本文 1 段落>

The amount of heat trickling up from the center of the Earth is negligible compared with the amount falling down on the Earth's surface from the Sun.

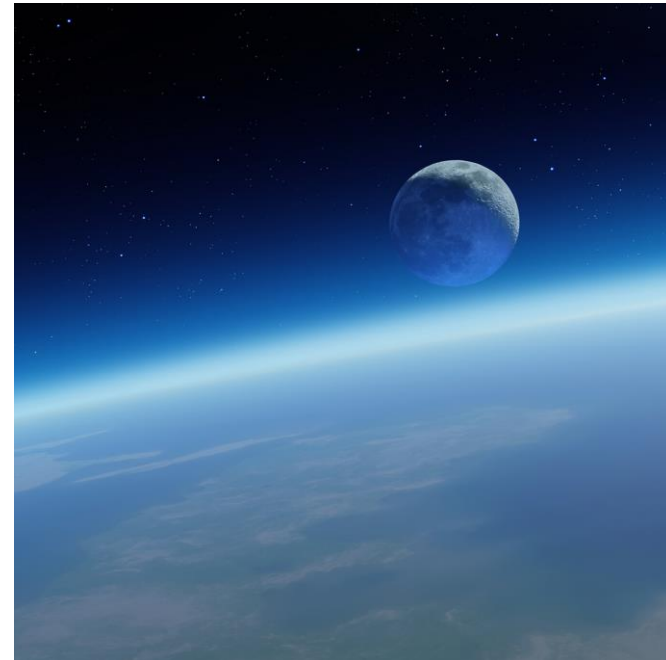
*trickle: したたる

2. What would become of the Earth without sunlight?

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Indeed, if the Sun were turned off, the temperature of the Earth would fall so far that **the air would freeze solid, and the planet would be covered with a layer of nitrogen and oxygen snow 10 meters thick.**



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<該当箇所：本文 2 段落>

- The amount of sunlight absorbed by the Earth has to equal on average the amount of energy radiated back to space. **地球が吸収する太陽光 = 地球が宇宙へ放出するエネルギー量**
- when we fly over it at night we don't see it glowing in the dark (except for cities). But that's because ~ **見えないが夜間も熱放出はある**
- we would see the Earth glowing in its own eerie, cool infrared light, more in the Sahara than Antarctica, more in daytime than at night.

赤外線：サハラ砂漠 > 南極 日中 > 夜 ただしゼロにはならない！

*eerie: 奇妙な・得たいの知れない

*infrared: 赤外線の