

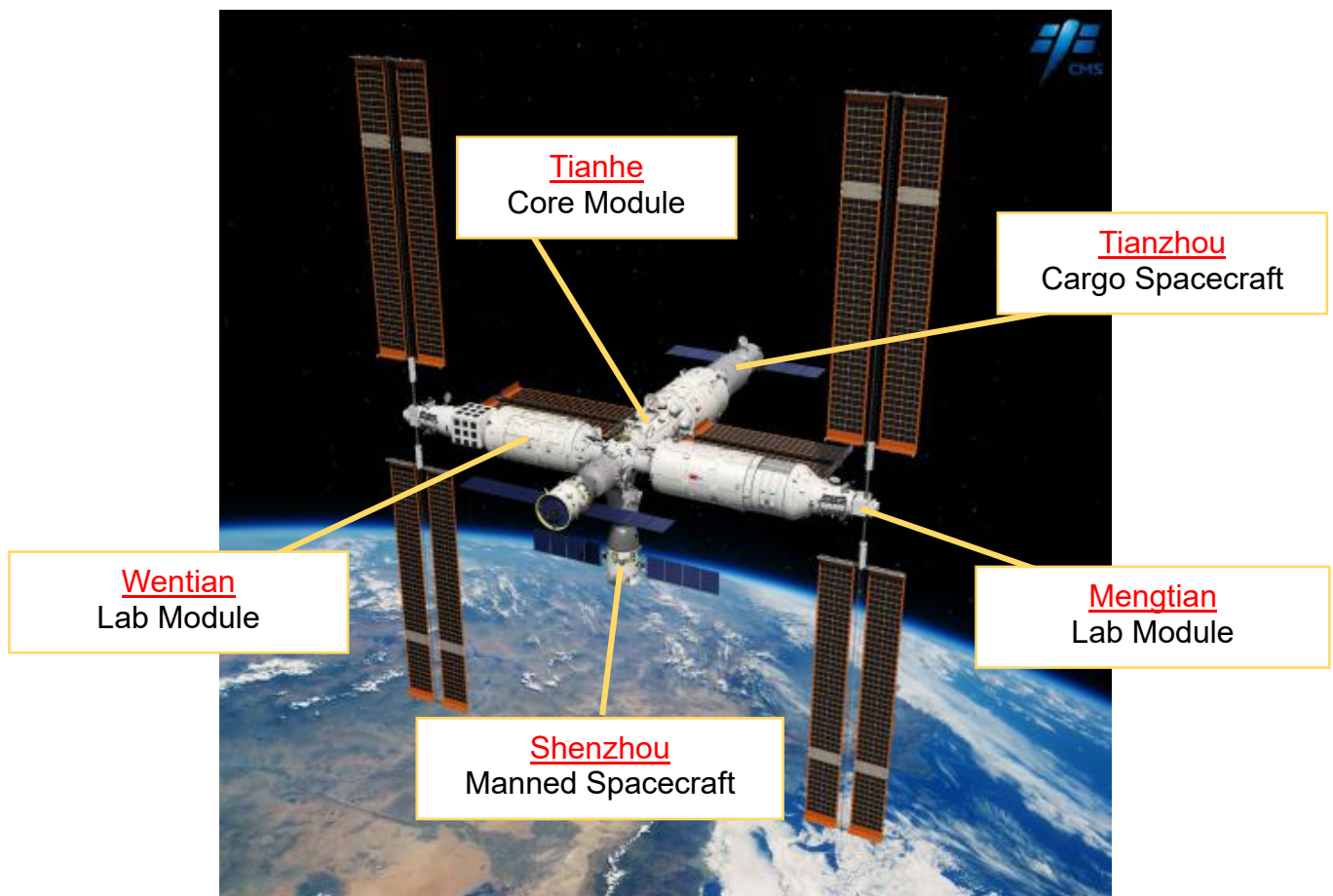
🗨️ **Think About It:** Here are some examples of Chinese astronaut training programmes. Which one would you like to try the most among all the programmes?

- ◆ Computer Operation and Maintenance Training
- ◆ Underwater Training
- ◆ Manual Rendezvous and Docking Training
- ◆ Centrifuge Training
- ◆ Spacecraft Operation Procedures Training
- ◆ Lifesaving Drill at Sea

Tiangong Space Station

Operating approximately 400 kilometres above the Earth's surface, the Tiangong Space Station not only serves as a home to the astronauts but also as a space scientific laboratory.

4) The Tiangong Space Station can be flexibly assembled in-orbit like building blocks. Observe the space station model displayed at "Docking with Tiangong" and fill the names of the modules and spacecraft into the boxes below.



Think About It: What is the purpose of installing multiple sets of large solar panels to the Tiangong Space Station?

[Reference: Solar panels (also known as solar wings) utilise sunlight to generate electricity and serve as the main source of energy for the space station. Solar panels can automatically adjust their positions to track the direction of sunlight, ensuring an optimal light-receiving angle.]

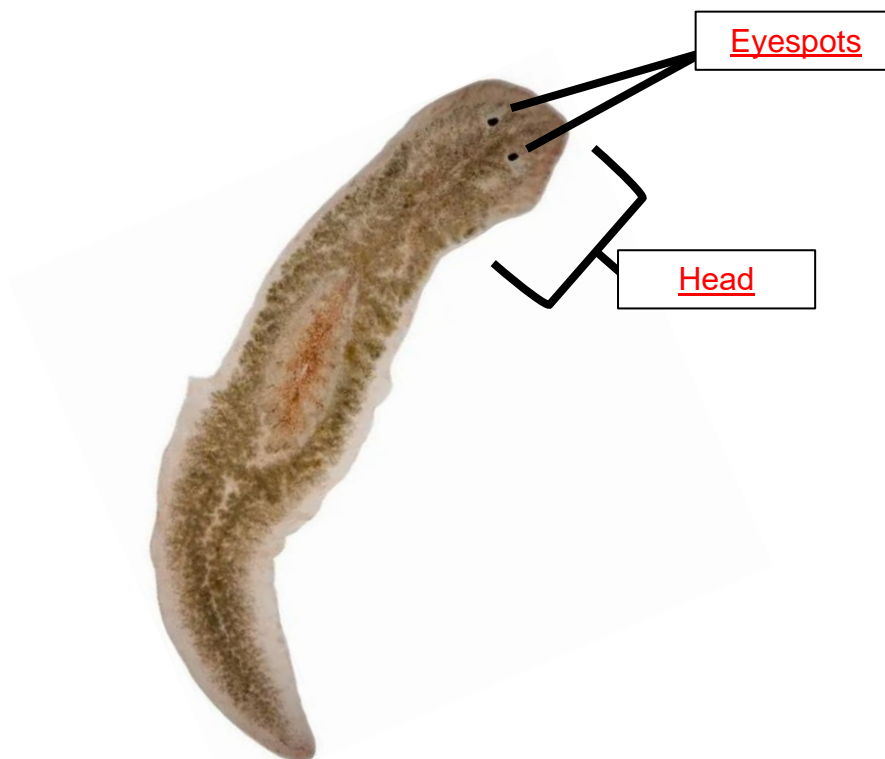
5) Go explore the "Infinity and Beyond" exhibition zone to learn about the planarian experiment in space, then fill in the blanks with suitable words.

Regenerative	Eyespots
Head	Repair

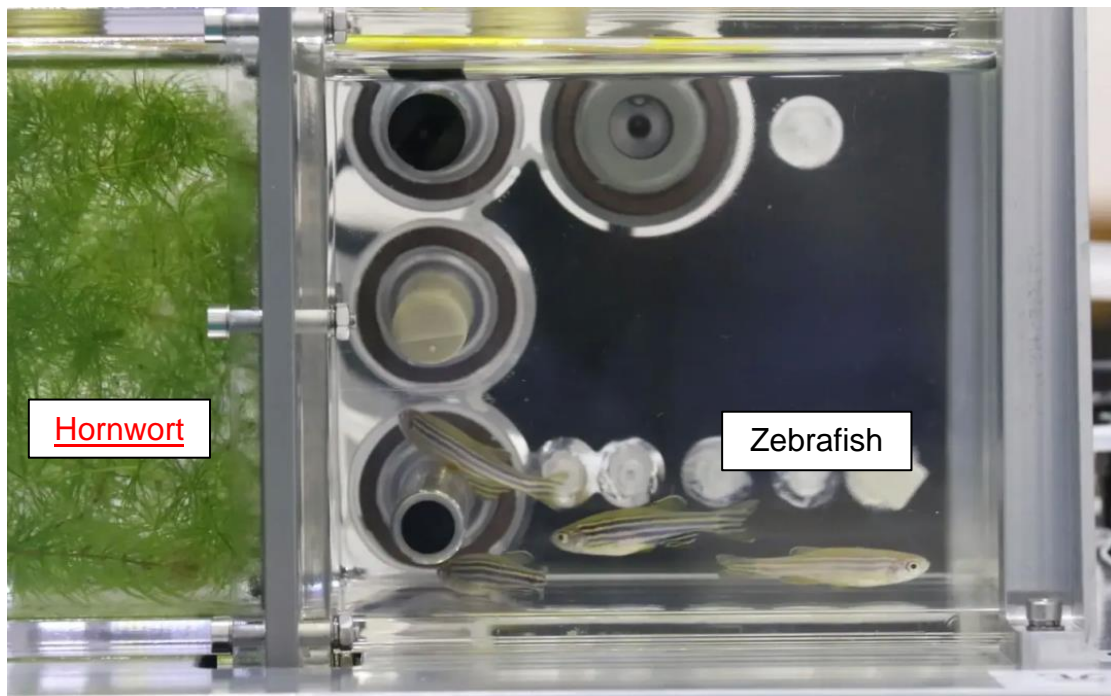
a) The Shenzhou-20 manned spacecraft carried the planarians to the Tiangong Space Station for research. Why did the scientists conduct the planarian experiment in space?

Planarians possess exceptional regenerative abilities. Scientists aimed to understand how space conditions affect repair abilities of organisms from the planarian experiment in space.

b) Use the microscope to observe the planarian specimen. Then, refer to the panel text and fill in the boxes below with the body parts of the planarian.



- 6) Go explore the "Tiangong Aquarium" exhibition zone to learn about the zebrafish experiment in space, and complete the following questions.
- a) Zebrafish were sent to the Tiangong Space Station by the Shenzhou-18 and Shenzhou-20 spacecraft for research. They share over 70% genetic similarity with humans, making them widely used in biomedical research.
- b) The zebrafish were raised with a kind of aquatic plant in a specially designed "space aquarium". Can you find out the name of the plant from the video and write it into the box below?



Think About It: What are the benefits of raising zebrafish together with aquatic plants in the "space aquarium"?

[Reference: Aquatic plants can perform photosynthesis under lighting to provide oxygen to zebrafish. The plants absorb the carbon dioxide produced by zebrafish during respiration, as well as purifying the water by absorbing and breaking down the zebrafish excrement.]

Think About It: Humans experience a disorienting sensation of weightlessness in space. Did the zebrafish exhibit abnormal behaviors when they swam in the weightless space environment? Watch the documentary footage of the zebrafish aboard the Tiangong Space Station, and observe how the fish swam differently in space.

[Reference: Zebrafish exhibited abnormal orientation behaviours under weightlessness, such as dorsal and ventral inverted swimming, rotational movement, and circling.]



7) Go explore the "Horticulture in Tiangong" exhibition zone to learn how astronauts grow fruits and vegetables in space. Then complete the following questions.

a) Which of the following is/are the reason(s) for astronauts growing fruits and vegetables on the Tiangong Space Station?

A) As food

B) For air purification

C) For relieving astronauts' psychological stress

D) All of the above

Answer: D

b) Which of the following plants have astronauts grown aboard the Tiangong Space Station?

A) Bananas and apples

B) Passion fruit and cherry tomatoes

C) Cherry tomatoes and lettuce

D) Lettuce and passion fruit

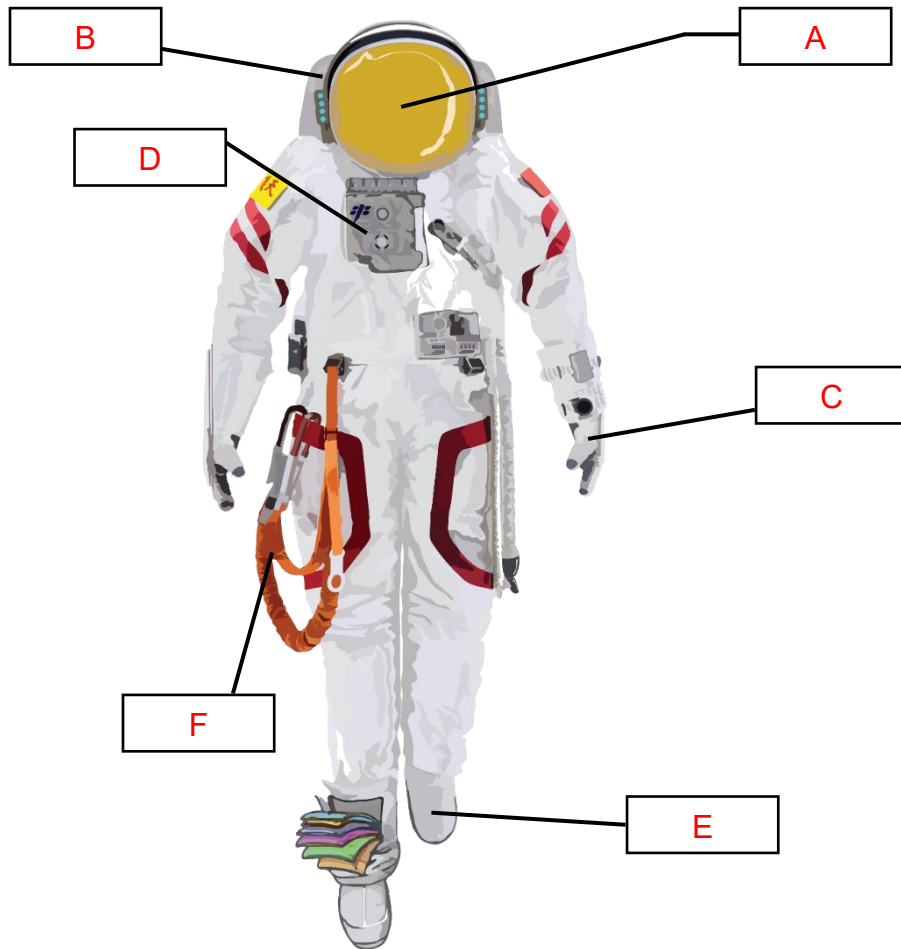
Answer: C



Spacewalks

8) To cope with the harsh environment of space, Chinese astronauts will put on the "Feitian" extravehicular spacesuits when stepping out of the space station for extravehicular missions. With reference to the text panel, match different parts of the extravehicular spacesuit by writing the corresponding letters into the boxes below.

A. Helmet Visor	B. Backpack	C. Glove
D. Electrical Control Panel	E. Boot	F. Safety Tether



9) If you became an astronaut, where in the Universe would you want to go to explore? Why?

[You may refer to the digital panel of "Imagination | Space"]
