



**Health, food and climate. We explore. You benefit.**

European Space Agency, ESA – Feb. 23<sup>rd</sup> 2022



1. How far is the International Space Station from the Earth's surface?

2. What is the name of the European science laboratory on board the ISS?

3. Are the following statements true (T) or false (F)? Tick (✓).

	T	F
- There are more than 50 racks in the laboratory.	<input type="checkbox"/>	<input type="checkbox"/>
- All these racks are stocked with tests and tools.	<input type="checkbox"/>	<input type="checkbox"/>
- This laboratory is a replica of an existing one on Earth.	<input type="checkbox"/>	<input type="checkbox"/>

4. Name 3 things that are studied in this laboratory:

- 
- 
- 

5. Fill in the gaps with words from the video:

"You may have noticed that my Alpha \_\_\_\_\_ has \_\_\_\_\_ coloured slots around the edge. Each of these represents one of the \_\_\_\_\_ of the United Nations. The SDGs are a collection of \_\_\_\_\_ to achieve a \_\_\_\_\_ and \_\_\_\_\_ future by the \_\_\_\_\_ of this \_\_\_\_\_.

Today, I want to show you how \_\_\_\_\_ is relevant to \_\_\_\_\_ of these \_\_\_\_\_."

6. Match each theme to the correct SDG:

Climate action	•	• SDG 3
Zero hunger and food security	•	• SDG 13
Good health and well-being	•	• SDG 2

7. What phenomenon do astronauts experience in space that makes them float?

8. What effect does it have on their body?

9. Fill in the gaps with words from the video:

"Recently, \_\_\_\_\_ was collected from a \_\_\_\_\_ astronauts on \_\_\_\_\_ missions here on ISS, looking at \_\_\_\_\_ in bone structure. This work helped \_\_\_\_\_ to develop \_\_\_\_\_ - \_\_\_\_\_ that analyse bone and joint \_\_\_\_\_ in just \_\_\_\_\_ minutes. This non-invasive, 3D imaging is essential to assess the \_\_\_\_\_ of bones and their strength, all while exposing the patient to very \_\_\_\_\_ levels of \_\_\_\_\_."

10. What is the name of the experiment carried out in the Kubik Facility?

11. Circle the correct word:

For this experiment, tiny **germs** / **worms** are used because they are **similar to** / **different from** human muscles, to **study** / **demonstrate** how muscle structures and genes can be altered by **spaceflight** / **spacecraft**. This experiment will ultimately aim at helping **astronauts** / **people on Earth**.

12. Match the pairs of items that go together in the video. ⚠ One item is extra.

- |                         |   |                                       |
|-------------------------|---|---------------------------------------|
| Biolab                  | • | • edible and nutritious               |
| Arthrospira-B           | • | • a blue-green alga                   |
| Spirulina               | • | • photosynthetic                      |
| Advantages of Spirulina | • | • another laboratory on board the ISS |
| Extra:                  | • | • the name given to an experiment     |

13. Name two things that researchers have studied on the bacteria Thomas Pesquet talks about.

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-

14. Who directly benefits from the research?

15. Complete the following grid.

Name of the last laboratory presented by Thomas Pesquet	
Name of the experiment	
Specific equipment	
Studied phenomena	
Goal of the experiment	