

## EATING ON THE MOON

In the following, the text between “ ” suggests what to say to the children. Questions are in **bold** and actions in *italics*.



**This symbol indicates:**  
things to look at



**This symbol indicates:**  
action to take/activity to do



**This symbol indicates:**  
explanations to delve  
deeper into the subject

“On the Moon, you can't get new supplies every day. There are no shops where you can buy things, so food needs to keep for a long time and take up as little room as possible to be carried on board.”

*Ask the children to look out in the exhibition for the food eaten by astronauts during a lunar mission.*



*Ask them to look at the “Moon menu” display case in the exhibition and describe what they see.*

*“Most of the food has been*

- dehydrated or freeze-dried: that means that the water has been removed and the food is often a powder.
- Vacuum-packed: the air in the packaging has been removed so the plastic is often stuck to the food.
- Tinned: bacteria can't grow inside.

*These food items are from previous missions to the Moon. They weren't eaten so were brought back to Earth.”*

**“What kind of food is it?”**

*(This activity is quite hard for children.)*

*Allow the children time to make suggestions.*



*Once they have thought about it, ask them to link the vacuum-packed food shown with the photos of fresh food (photos provided in the “Food resources” material).*

*Comment: They are named on the cards below the objects.*



Astronauts very rarely eat fresh food. It is difficult and time-consuming to send cargo ships to the International Space Station: it requires a whole launcher and a journey of several hours.

So, they only have new supplies a few times a year. This will be even more relevant when astronauts live on the Moon, because each journey takes 3 days.

We do not yet know how to grow large quantities of fruit and vegetables in space or on the Moon.

Scientists are trying to design greenhouses in which we could try to grow plants on the Moon.



## Key points

- **Nobody eats fresh food on the Moon or in space.**
- **Astronauts only receive supplies a few times a year.**



## Activity to be conducted in class

### A Moon menu

To round off their trip to the Cité de l'Espace space park, the class can watch a short video called “How to cook spinach in space” with a highlight 30 s into it).

[https://www.youtube.com/watch?v=iGiQZlb34\\_s](https://www.youtube.com/watch?v=iGiQZlb34_s)

#### **Material:**

- Individual pouches of fruit compote
- Packets of biscuits or dried fruit/nuts
- Soup or purée in freeze-dried form or any other powdered freeze-dried food
- Canned savoury foods (sardines, peas, pâté, etc.)
- Plastic zip-lock bags
- Straws
- Cocoa powder
- Water

#### **Experiment:**

Ask the children to plan a meal using the foods packaged to keep for a long time.

The meal must include a starter, main course and dessert.

#### **Preparation:**

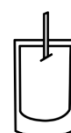
- Place a few grams of the freeze-dried food into the zip-lock bag.



#### **In class, in front of everybody**

- Add hot or cold water up to 3/4 of the zip-lock bag.
- Zip the bag shut then shake it until the powder and water are well mixed.
- Open the bag, put the straw in it and shut the zip around the straw so the bag is as well sealed as possible.

Enjoy!





## Food resources



Cocoa drink

## Food resources



Sugar lumps

## Food resources



Bacon rashers



# Food resources



Salmon



## Food resources



Grape juice

## Food resources



Tuna salad