

# Open Space Lab

## BECOME A SPACE AGENT english

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Take part in the 'Step into Space' mission! Collect stamps as you complete the missions. Complete three missions to become a 'Space Cadet', complete six missions to become 'Space Captain'.

Find your 'Space Agent Pass' on the table and check out the handouts to find out instructions for your first mission.

Share the progress of your mission online using #stepintospace.

**Have fun!**

### **Mission:**

#### **What We Made from Space?**

Check out the objects on the posters of '**What We Made from Space**'. How many of these objects do you have in your home too? What is it, how do you use it and how do space explorers use it?

Write at least one object on your 'Space Agent Pass' and collect a stamp for your accomplished mission.



Learn more about how these objects are related to space and grab the 'What we made from Space' handout.

### **Mission:**

#### **GPS Apps on your smartphone**

Can you think of another use of navigation systems like GPS on apps like Google Maps in our lives today? Check out the handout in the exhibition part '**What We Made from Space**', there you can find some more things that GPS is useful for.

Write your answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.



## Mission:

### Where on Earth am I?

You are alone and lost somewhere on Earth with nothing but a GPS receiver, but it does not have the software to do all these calculations that your phone does. Your mission is to follow the steps and locate your position using only the Europe map and the satellite circles.

**Step 1:** Find the map of Europe on the table and the four satellite circles in different sizes. The four circles indicate how long their signal travel time was from the satellite to earth.

**Step 2:** Match the right circle for the right satellite, using the satellite numbers. Place them on the satellite marks on the map and trace the circles.

**Step 3:** Find where the circles overlap to locate your position. You are right at the centre of this field.

Where are you? It is a region in Europe. Write the answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.

If you want to learn more about how GPS works, check out the take-away handout.



## Mission:

### What Happened in Europe in the Summer of 2018?

What happened in Europe in June 2018? Check out the **satellite images in the exhibition** and look for the poster that shows the two images of Europe. Find out what happened and why these two images are so different only after one month has passed. Check out the handout to see what had happened.

Write the answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.

## Mission:

### Build Your Own Creative Satellite

Check out how the satellites look like on the ESA Sentinel App. **You can find the app on one of the tablets in the exhibition.** In the menu on the bottom of the app you can find a '3D Model' tab. Click through the different models, come back to the table and build your own creative satellite through painting and colouring the foldable triangles. Glue them together as you wish. You can leave them in the exhibition or take them home with you.

As soon as you accomplished your mission, make sure you get another stamp in your 'Space Agent Pass'.



The ESA app is free and available online. Feel free to check it out at home as well.

## **Mission:**

### **Solar Farm – What Shape is it?**

A solar power farm in China built a very special shape. You can only see the shape from space. Check out the **satellite images in the exhibition** and look for the solar farm. Can you find out what shape they created?

Write the answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.



## Mission:

### **Make a Time-lapse Video at the EO Browser Computer Station**

Find the Earth Observation Browser in the exhibition. **It is the one computer with a keyboard and a mouse.** Find the game card right next to it with further instructions about how to make a time-lapse video.

Collect a stamp in your 'Space Agent Pass' after you accomplished the mission.

If you want to learn more about how the observation software works, check out the take-away handout.

The app is free and available online for anyone to use. Feel free to check it out at home as well, make your own free account and use it for your next presentation in school.

[apps.sentinel-hub.com/eo-browser](https://apps.sentinel-hub.com/eo-browser)



## Mission:

### Become Active

What is your local activism group fighting for? You can find one part here in the exhibition that is dedicated to **'Become Active'**. Find the ladder in the exhibition to answer this question, and see if you can get involved in their mission!

Write the answer on your 'Space Agent Pass' and get a stamp for your accomplished mission.

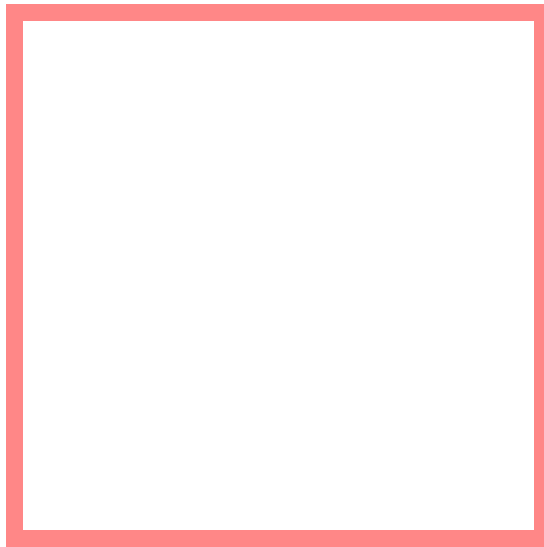
## Mission:

### Blue Dot

Look at the artwork by WE COLONISE THE MOON. **It is the one with the black wall and the blue light bulb.** The artwork creatively aims to show you another perspective from far away. Where are you when looking at the artwork and what do you see?

Write the answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.





## Mission:

### Robot Skills

What can robot NoodleFeet do using his special legs? NoodleFeet's legs can be exchanged for legs for a specific function. What other things than walking do these other legs allow him to do?

You can find the robotic legs here in the exhibition. There is also a video that allows you to find out more about the functions of the legs. The handout about '**A Creative Space**' also shortly describes what these legs are able to do.





Write one answer on your 'Space Agent Pass' and collect a stamp for your accomplished mission.

### **Mission:**

## **What Animals Travelled to Space?**

Can you name three different animals who have travelled to space? Check out the **comic Chimponauts and Astrocats**.

Write the three answers on your 'Space Agent Pass' and collect a stamp for your accomplished mission.

