



EMPIRIBOX

Primary School Science

Empiribox doesn't like to limit lessons to staying here on planet Earth; we want to launch up into space and see what science we can do up there! From the planets to stars, comets to rockets, we'll explore it all.

In this activity, your class will discuss what would be needed to create a hotel on the Moon and design a leaflet to promote it.

Spectacular Science

Moon Hotel

What would be needed for life on the Moon?

For a planet to sustain life as it is on Earth, we need a few basic things in just the right quantities.

1. Oxygen to breathe
2. Water to drink and to help us grow crops
3. Sunlight to warm the planet and to grow crops
4. Crops we can grow to make food

While we have found evidence of water on the Moon, the current oxygen levels, distance from the Sun and lack of crops means we would be unable to sustain life there at the moment, unless we had a purpose-built Moon Hotel!

Finding water ice is very important because not only can we drink the water, we can also split water into hydrogen and oxygen using electricity. The oxygen can be used to provide breathable air for any moon base. Also, hydrogen and oxygen are used as rocket fuel which means space ships could take off from Earth and refuel on the moon before heading to other planets such as Mars.

Activity – can you find out what is in each food package?

Your mission is to design a moon base so astronauts can survive there. How will your base provide these basic human needs?

Water:

Air:

Food:

Electricity:

Sketch your ideas on a sheet of paper or on the computer using labels to show how things work.

Class discussion

As a class, talk about why there is no hotel on another planet now and why. Think about how people would get there, cost of building, transporting materials and sustaining life.