Hello!

This KS1 resource pack will help you discover more about the Royal Observatory Greenwich and get the most out of your visit.

There are 3 different activities for you and your group to choose from. You can do one or all of them and they can be completed in any order you like.

**Kit list:**
All you need to do is print off the activities you would like to do and bring a pencil — easy-peasy.

**Activity 1 — Cosmic Treasure Hunt**
The group leader will read out some descriptive words of objects that the pupils then need to find. You may want to split up your class into smaller groups and see who can find all of the treasures first. There is also a drawing exercise for the children to do in a separate “Cosmic Treasure Hunt Pupil Sheet”.

**Activity 2 — Ordering Our Solar System**
Let’s put our Solar System in order of size and distance from the Sun. Please make sure each pupil has a pencil to complete their own activity sheet.

**Activity 3 — Mystery Objects**
You and your pupils will investigate the different shapes of objects in and around the Astronomy Centre. Please make sure each pupil has a pencil to complete their own activity sheet.
Astronomy Centre Map

Use this map to help you find your way around.

GROUND FLOOR
The Weller Astronomy Galleries
1. Entrance
2. Astronomy Inspires gallery
3. Astronomy Explores gallery
4. Astronomy Questions gallery

LOWER GROUND FLOOR
The Peter Harrison Planetarium
1. Astronomy Shop
2. Observatory Café
3. The Royal Observatory Micro-gallery
4. The Peter Harrison Planetarium
Let’s go on a treasure hunt! Look around the Astronomy Centre and see if you can find the things below. Remember to tick them off when you find them.

In the **Astronomy Centre entrance**, find:
- Something that came from space. How long is it in hand spans?

In the **Astronomy Explores gallery**, find:
- The big white telescope. Can you make it move and look at different things?
- The camera that can see something your eyes can’t.
- Something that was built to go to space (clue: look up!). Which planet was it going to?
- Something shiny.
- A wheel that makes a rainbow. How many colours are there in a rainbow?
- Something very bright.

In the **Astronomy Questions gallery**, find:
- An old photo.
- A sphere.
- Something made of metal.
- Something you can use as a mirror.

In the **Peter Harrison Planetarium** foyer:
- Ask your pupils to look at the photos in this room. If they could take a photograph of anything in space what would it be? Ask them to draw it in the Cosmic Treasure Hunt pupil sheet.
There are eight planets in the Solar System. Four are made of rock and another four are made of gas.

Put these planets in order, starting from the biggest to the smallest: Earth, Jupiter, Saturn, Mercury: Jupiter, Saturn, Earth, Mercury

FACT: You can fit 1300 Earths inside Jupiter and 750 Earths inside Saturn! Mercury is the smallest planet in our Solar System.

Mars

Put these planets in order of distances from the Sun. Start with the one that is closest to the Sun.

1. Mercury
2. Venus
3. Earth
4. Mars
5. Jupiter
6. Saturn
7. Uranus
8. Neptune
Activity 3 — Mystery Objects

**Beagle 2 Lander**
The Beagle 2 lander was launched in June 2003 and landed on Mars on Christmas Day 2003. It never sent back a signal to say that it landed safely so astronomers did not know what happened to it until January 2015 when a satellite orbiting Mars took a picture of it.

**Telescope**
Some of the telescopes professional astronomers use today are computerised so that they can be controlled from anywhere in the world!

**Book**
This is a very famous book written by Isaac Newton. It uses maths to explain how things move, including how the planets orbit the Sun.

**Meteorite**
A meteorite is a piece of rock or metal from space that has survived its burning descent through the Earth’s atmosphere to land on the ground. This meteorite crashed to Earth in prehistoric time in what we now call Namibia, Africa.

**Planetarium Cone**
Underneath this cone is the planetarium. The cone itself is made of bronze and weighs 45 tonnes — or 25 hippopotamuses!
Look at the photographs in this room.
If you could take a photo of anything in space what would it be?
Draw it in the box.

Name:
Activity 2 — Ordering Our Solar System

There are eight planets in the Solar System.
Four are made of rock and another four are made of gas.
Put these planets in order, starting from the biggest to the smallest:

Earth, Jupiter, Saturn, Mercury:

Put these planets in order of distances from the Sun.
Start with the one that is closest to the Sun.

Put these planets in order of distances from the Sun.
Start with the one that is closest to the Sun.
Activity 3 — Mystery Objects

Look around the Astronomy Centre.
Draw lines to match the shapes with the objects.

Name: