



LOOKING FOR LIFE - ACTIVITY SHEET 01

We know quite a lot about the planets in the Solar System.

We have several ways of learning about planets:

- **Looking through Earth-based telescopes.**
- **Using space telescopes, like the Hubble Space Telescope.**
- **Studying the light they reflect, to find out about their atmospheres.**
- **Sending spacecraft to fly close-by, or even to land on their surfaces.**

One day we may even send astronauts to visit another planet, such as Mars.

We would really like to know if any of the planets (or their moons) have life on them.

- What should we look for, to see if a planet might be suitable for life?
- What should we look for, to see if a planet actually has life on it?

Mission to the stars.

One day, we may have to leave Earth.

The Sun may start to expand as it nears the end of its life, or there may be an environmental disaster. How can we escape? How can we ensure the future of the human species?

Imagine that this is your mission.

You and your friends are to board a spacecraft, where you will be put into a deep sleep.

After hundreds of years, your craft will reach a different planetary system, orbiting a different star.

You will be woken up, and then your work begins.

You will have to examine the planets of this new solar system.

You will study their orbits and look for signs of life.

- **Your task is to design your spacecraft.**

What instruments must it have, in order for you to examine the new planets?

How will you decide which is the most suitable for life?

Where will you land, to establish a new human colony?

- **It is up to you how you present your ideas.**

As a poster, or as a piece of written work, or as a presentation to the class.

Happy landings!

