

S1 Astrobiology: Worksheet 4

A **space probe** is a robotic spacecraft that explores space. Humans have built many different space probes to explore space for many years.



Activity 1: Design a Space Probe

You are part of a team that will **design**, build and send a space probe to a nearby star system to **search for signs of life**.

Your job is to **design the lander** that will be sent to the surface of each planet in the star system.

1. Produce a drawing or a model of a space probe.

2. Your design must include special equipment to search for life. Label clearly this equipment and what it does.

Greetings Earthling!



Space Lander Design Criteria: Experiments and Equipment

Has the criteria been met? ✓ or X

- | | |
|---|--|
| 1. Temperature probe: used to measure the temperature range on the surface of the planet. Why is this important? | |
| 2. Liquid sampler: to test for the presence of water. Why is this important? | |
| 3. Gas sensor: to test the elements in the atmosphere. Which elements? | |
| 4. Light meter: to assess the amount of energy is available. Why is this important? | |
| 5. Soil sampler: to test for the presence of particular elements. Which elements and why? | |