The History of Astrobiology

- The space age began to unfold in the 1950s and early 1960s
- People began to see valley networks and channels on the surface of Mars
  - → Outflow channels suggest the possibility of liquid water on the early surface of the planet which led to speculation that it may have been a habitable planet

Looking for civilizations and other life forms

<u>The 1970s</u>

- Viking I and Viking II landed on Mars and did the first biological experiments on the surface of Mars
- The results were inconclusive, which led to much controversy
- Arecibo Dish Observatory in Puerto Rico sent out the first signal to alien intelligence in binary code:
  - → Diagram of our DNA
  - → Diagram of the human body
  - → A map of our solar system
  - → The numbers 1 to 10

<u>In more recent times</u>

- Mars Science Laboratory conducted experiments to study the environments of other planets and their capability to support life
  - → It sent back images of ancient rivers, ancient river beds and conglomerated rocks believed to have formed by flowing water at the bottom of rivers on Mars, over 3 billion years ago
- The most extraordinary development in Astrobiology over the past two decades has been the search for planets around other stars, particularly for Earth-like planets

  The drawbacks of the planets that have been discovered:

  - → Too hot
  - → Too large
  - → Too close to their parent star
  - → they're giant gas planets that don't have the necessary surfaces suitable for life