

Science:

The Study of nature that proceeds by posing questions and observations

THE EARLY YEARS OF MICROBIOLOGY:

WHAT DOES LIFE REALLY LOOK LIKE?

- ◆ Leeuwenhoek was one of the first to discover a previously unknown microbial world.

Microorganisms (microbes):

Organisms that are too small to be seen without a microscope.

1.1 Describe the world-changing scientific contributions of Leeuwenhoek

He designed and created his own microscopes to investigate the world up close. He examined specimens such as drops of blood, plaque, bee stingers, etc. Was the first to discover microorganisms.

1.2 Define Microbes in the words of Leeuwenhoek and as we know them today

Microbes are microscopic organisms and can consist of bacterial, single celled plants, animals, or fungi. Leeuwenhoek described microorganisms as tiny round and oval shaped "animalcules which were no bigger than one hundredth of a grain of sand". Today we describe the vast ecosystem of microbes as more species than there are men in the kingdom. Today, divide microorganisms into 6 categories:

- Bacteria
- archaea
- fungi
- Protozoa
- Algae
- small multicellular animals.

HOW CAN MICROBES BE CLASSIFIED?

- ◆ Carolus Linnaeus developed a taxonomic system for naming plants and animals

Taxonomic System:

A system for naming plants and animals and grouping similar organisms together.

- ◆ Microorganisms can be grouped into 7 basic categories:

- Bacteria
- Archaea
- Fungi
- Protozoa
- Algae
- Small multicellular animals
- Viruses