



4th Grade Microscopic World Unit

Benchmarks

Chapter 4: The Physical Setting

The Structure of Matter

4D(3-5)#3: Materials may be composed of parts that are too small to be seen without magnification.

Chapter 5: The Living Environment

Cells

5C(3-5)#1: Some living things consist of a living cell. Like familiar organisms, they need food, water, and air; ~~a way to dispose of waste~~; and an environment they can live in.

5C(3-5)#2: Microscopes make it possible to see that living things are made mostly of cells. Some organisms are made of a collection of similar cells that benefit from cooperating. Some organisms' cells vary greatly in appearance and perform very different roles in the organism.*

Chapter 12: Habits of Mind

Values and Attitudes

12A(3-5)#1: Keep records of their investigations and observations and not change the records later.

Manipulation and Observation

12C(3-5)#3: Keep a notebook that describes observations made, carefully distinguishes actual observations from ideas and speculations about what was observed, and is understandable weeks or months later.

Communication Skills

12D(3-5)#2: Make sketches to aid in [reporting observations and] explaining procedures or ideas.

District-Written Benchmark

Use a microscope properly and be able to bring an object into focus.

*The last two sentences of the benchmark are only introduced in fourth grade.

Chapter titles and headers correlate with *Benchmarks for Science Literacy* by Project 2061.