

1st Grade Science in the Toy Box Unit

Unit Benchmarks

Chapter 1: The Nature of Science

The Scientific World

1A(K-2)#1: When a science investigation is done the way it was done before, we expect to get a very similar result.

The Scientific Enterprise

1C(K-2) #1: Everybody can do science and invent things and ideas.

1C(K-2)#2: In doing science, it is often helpful to work with a team and to share findings with others. All teams members should reach their own individual conclusion, however, about what the findings mean.

Chapter 3: The Nature of Technology

Technology and Science

3A(K-2) #1: Tools are used to do things better or more easily and to do things that could otherwise not be done at all.

Chapter 4: The Physical Setting

Motion

4F(K-2)#1: Things move in many different ways, such as straight, zigzag, round and round, back and forth, and fast and slow.

4F(K-2)#2: The way to change how something is moving is to give it a push or a pull.

Forces of Nature

4G(K-2)#1: Things near the earth fall to the ground unless something holds them up.

Chapter 9: The Mathematical World

Symbolic Relationships

9B(K-2)#2: Sometimes changing one thing causes a change in something else.

Chapter 11: Common Themes

Systems

11A(K-2)#1: Most things are made of parts.

11A(K-2)#2: Something may not work if some of its parts are missing.

11A(K-2)#3: When parts are put together, they can do things that they couldn't do by themselves.

Models

11B(K-2)#1: Many of the toys children play with are like real things only in some ways. They are not the same size, are missing many details, or are not able to do all of the same things.

11B(K-2)#2: A model of something is different from the real thing but can be used to learn something about the real thing.

11B(K-2)#3: One way to describe something is to say how it is like something else.

Constancy and Change

11C(K-2)#3: Things can change in different ways such as size weight, color and movement. Some small things can be detected by taking measurements.

Scale

11D(K-2)#1: Things in nature and things people make have very different sizes, weights, ages and speeds.

Chapter 12: Habits of Mind

Computation and Estimation

12B(K-2)#1: Use whole numbers and simple, everyday fractions in ordering, counting, identifying, measuring, and describing things and experiences.

Manipulation and Observation

12C(K-2)#3: Make something out of paper, cardboard, wood, plastic, metal, or existing objects that can actually be used to perform a task.

Communication Skills

12D(K-2)#1 Describe and compare things in terms of number, shape, texture, size, weight, color and motion.