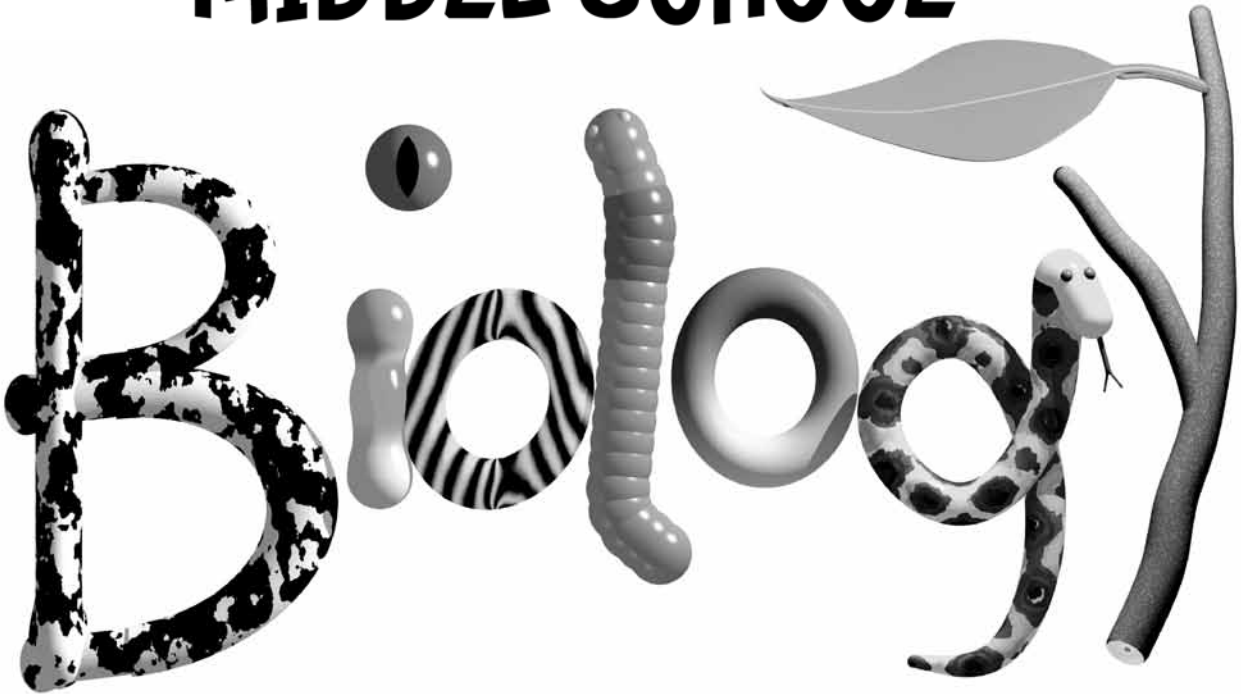


FOCUS ON

Grades 5-8

MIDDLE SCHOOL



Teacher's Manual

Rebecca W. Keller, PhD



Materials at a Glance

Experiment 1	Experiment 2	Experiment 3	Experiment 4	Experiment 5
Items such as: tennis ball cotton ball orange banana apple paper sticks leaves rocks grass Legos or building blocks, etc.	pencil or pen colored pencils or crayons	plant with at least 6 flat green leaves lightweight cardboard or construction paper tape 2 small jars marking pen	2 or more small jars 2 or more fresh white carnation flowers food coloring knife	2 small jars several pinto beans absorbent white paper plastic wrap clear tape 2 rubber bands marking pen knife
Experiment 6	Experiment 7	Experiment 8	Experiment 9	Experiment 10
microscope with a 10X objective ¹ microscope slides ² 3 eye droppers fresh pond water or water mixed with soil protozoa study kit ³ methyl cellulose ⁴	microscope with a 10X objective ¹ microscope slides ² 3 eye droppers measuring cup & spoons protozoa study kit from Experiment 6 ³ baker's yeast distilled water Eosin Y stain ⁵	caterpillars collected locally OR butterfly kit ⁶ small cage	tadpoles collected locally or a tadpole kit ⁷ tadpole food ⁷ small aquarium tap water conditioner and tap water OR distilled water	clear glass or plastic tank with a solid lid water plastic wrap soil small plants small bugs: worms small beetles ants, etc.

The following materials are available from Home Science Tools, www.hometrainingtools.com:

- ¹ Student Microscope (or search the internet to find other microscopes)
- ² Glass Depression Slides, MS-SLIDCON or MS-SLIDC12
- ³ Basic Protozoa Set, LD-PROBASC
- ⁴ Methyl Cellulose, CH-METHCEL
- ⁵ Eosin Y stain, CH-EOSIN
- ⁶ Butterfly Garden, LM-BFLYGAR
Butterfly Pupae, LM-BFLYCUL
- ⁷ Grow-A-Frog Kit, www.growafrog.com

Most of the items from Home Science Tools are included in their Real Science-4-Kids Level 1 Science Kit, RS-KTLEVI

Materials at a Glance

By type and quantity—for all experiments

Equipment	Materials (continued)	Living Things
aquarium, small cage, small (for butterfly) eye droppers (3) jars, small (2 or more) knife measuring cup & spoons microscope with a 10X objective ¹ microscope slides ² scissors tank, clear glass or plastic with a solid lid	food coloring grass leaves Legos or building blocks methyl cellulose ⁴ orange paper (1 sheet, any kind) paper, absorbent white pen (optional) pen, marking pencil pencils, colored, or crayons plastic wrap rocks (1 or more different rocks) rubber bands (2) soil sticks tadpole food ⁷ tape (any) tape, clear water: distilled water: fresh pond water or water mixed with soil water: tap water and tap water conditioner OR distilled water	beans, dried, several (such as pinto beans) carnation flowers (2 or more fresh, white) caterpillars collected locally OR butterfly kit ⁶ plant with at least 6 flat green leaves protozoa study kit ³ tadpoles collected locally or a tadpole kit ⁷ To place in ecosystem: (Experiment 10) plants, small, several small bugs: worms small beetles ants, etc.
Materials		
<i>Focus On Middle School Biology Laboratory Workbook</i> apple baker's yeast ball, tennis banana cardboard (lightweight) OR construction paper cotton ball Eosin Y stain ⁵ eraser		

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- ¹ Student Microscope (or search the internet to find other microscopes)
- ² Glass Depression Slides, MS-SLIDCON or MS-SLIDC12
- ³ Basic Protozoa Set, LD-PROBASC
- ⁴ Methyl Cellulose, CH-METHCEL
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 Butterfly Pupae, LM-BFLYCUL
- ⁷ Grow-A-Frog Kit, www.growafrog.com

Most of the items from Home Science Tools are included in their Real Science-4-Kids Level 1 Science Kit, RS-KTLEV1