

Office of Larry E. Reider
Kern County Superintendent of Schools
Advocates for Children

Third Grade—Macmillan/McGraw-Hill

The GEMS guides listed below are suggested supplements to the Macmillan/McGraw-Hill curriculum. Teachers are encouraged to select the lessons from each guide they find most beneficial to their students' needs. Most guides have kits with hands-on materials available for check-out, at no charge, from KCSOS. Contact Kathy Hill at kahill@kern.org or 661.636.4640.

GEMS uses the strategies of hands-on examination and discovery throughout its program. Therefore, we have not listed the California State Standards correlation of Investigation and Exploration, Standard 5, as one or more strands will be found as a basic component of every GEMS guide.

Chapter/Lesson	TE pages	3 rd grade standard	GEMS Guide
3rd Grade--LIFE SCIENCE			
Chapter 1: Adaptations in Land Environments			
L#1: Living Things and Their Needs	24-33	3 LS 3.a, 3.b	<i>Aquatic Habitats</i> <i>Buzzing a Hive</i> (3.a) <i>Terrarium Habitats</i> (3.a) <i>School Yard Ecology</i> (3.b)
L#2: Life in the Desert	36-43		
L#3: Life in the Grassland	46-53		
L#4: Life in the Forest	56-65		
L#5: Life in the Artic Tundra	68-77		
Chapter 2: Adaptations in Water Environments			
L#1: The Water Planet	88-95	3 LS 3.a, 3.b	<i>Aquatic Habitats</i> <i>Buzzing a Hive</i> (3.a) <i>Terrarium Habitats</i> (3.a) <i>School Yard Ecology</i> (3.b)
L#2: Life in an Ocean	98-107		
L#3: Life in the Wetlands	110-117		
Chapter 3: Environments Change			
L#1: Living Things Change Their Environment	130-137	3 LS 3.c	<i>Aquatic Habitats</i> <i>Buzzing A Hive</i> <i>Terrarium Habitats</i>
L#2: Changes Affect Living Things	140-149	3 LS 3.d	<i>Aquatic Habitats</i> <i>Buzzing a Hive</i>

			<i>On Sandy Shores</i> <i>School Yard Ecology</i> <i>Terrarium Habitats</i>
L#3: Living Things of the Past	152-161	3 LS 3.e	No GEMS guides were found to align with standard
3rd Grade--EARTH SCIENCE			
L#1: Day and Night L#2: The Seasons	178-185 188-195	3 ES 4.e	No GEMS guides were found to align with standard 4.e <i>Earth, Moon, and Stars</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
L#3: The Moon	198-205	3 ES 4.b, 4.d	No GEMS guides were found to align with standard 4.b, 4.d <i>Earth, Moon, and Stars</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
Chapter 5: Our Solar System			
L#1: The Sun and Its Planets	218-225	3 ES 4.d	No GEMS guides were found to align with standard 4.d <i>Earth, Moon, and Stars</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
L#2: Telescopes: Discovering the Solar System	228-233	3 ES 4.c	No GEMS guides were found to align with standard 4.c <i>Earth, Moon, and Stars</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
L#3: The Stars	236-243	3 ES 4.a	No GEMS guides were found to align with standard 4.a <i>Earth, Moon, and Stars</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
The GEMS guide <i>Messages from Space</i> is designed for grades 5-8. However, third grade teachers may want to use it as a reference. The guide contains a scale model of the solar system, additional activities, and good background information on each planet.			
3rd Grade--PHYSICAL SCIENCE			
Chapter 6: Matter			
L#1: Solids, Liquids, and Gases	260-269	3 PS 1.e, 1.f	<i>Involving Dissolving</i> (1.e) <i>Liquid Explorations</i> (1.e) <i>Matter: Solids, Liquids, & Gases</i> <i>Secret Formulas</i> (1.e) <i>Oobleck</i> is a 4-8 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
L#2: Building Blocks of Matter	272-279	3 PS 1.h, 1.i	<i>Involving Dissolving</i> (1.h) <i>Liquid Explorations</i> (1.h) No GEMS guides were found to align with standard 1.i

L#3: Changing Matter	284-291	3 PS 1.g	<i>Involving Dissolving Liquid Explorations Matter: Solids, Liquids, & Gases Secret Formulas</i> <i>Oobleck</i> is a 4-8 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard. <i>Of Cabbages and Chemistry</i> is a 4-8 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
Chapter 7: Energy			
L#1: Energy all Around	302-311	3 PS 1.a	<i>School Yard Ecology</i> <i>Terrarium Habitats</i>
L#2: Using Energy	314-321	3 PS 1.b, 1.c	<i>On Sandy Shores</i> (1.b) No GEMS guides were found to align with standard 1.c
L#3: Energy on the Move	326-335	3 PS 1.d	No GEMS guides were found to align with standard
Chapter 8: Light			
L#1: How Light Moves	346-353	3 PS 2.b	<i>Bubble Festival</i> (Activity 5, Bubble Colors)
L#2: Seeing Light and Color	356-363	3 PS 2.c, 2.d	No GEMS guides were found to align with standards <i>Color Analyzers</i> is a 5-9 guide, and some activities may be adapted to 3 rd grade enrichment level to meet this standard.
L#3: Shadows	368-375	3 PS 2.a	<i>Terrarium Habitats</i>
3rd Grade--INVESTIGATION AND EXPERIMENTATION			
While the guides listed below do not address specific 3 rd grade standards in Life, Earth, or Physical Science, they do meet standards within the Investigation and Experimentation standard set.			
<i>Electric Circuits</i> <i>Mystery Festival</i>			