

**Correlation of the STC PROGRAM™ and GEMS®
with**

Georgia Performance Standards



**Grade 2
Course 41.01300 / Science**

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World-Class Support for Science & Math

Correlation of the **STC PROGRAM™** and **Great Explorations in Math and Science®** With **Georgia Performance Standards**

The following STC PROGRAM™ and GEMS® Units are recommended based on the Georgia Performance Standards. Provided for each grade level, are the units that most strongly align with the content objectives. Other STC PROGRAM™ and GEMS® Units may also match objectives within each grade level.

GRADE	STC PROGRAM™	GEMS®
Kindergarten	<ul style="list-style-type: none"> •Comparing and Measuring •Solids and Liquids 	<ul style="list-style-type: none"> •Eggs, Eggs, Everywhere •Sifting Through Science
1 st Grade	<ul style="list-style-type: none"> •Organisms •Weather 	<ul style="list-style-type: none"> •Ant Homes Under the Ground •Penguins and Their Young
2 nd Grade	<ul style="list-style-type: none"> •Changes •Plant Growth and Development •The Life Cycle of Butterflies 	<ul style="list-style-type: none"> •Buzzing a Hive •Involving Dissolving
3 rd Grade	<ul style="list-style-type: none"> •Animal Studies •Rocks and Minerals •Soils 	<ul style="list-style-type: none"> •On Sandy Shores •Terrarium Habitats
4 th Grade	<ul style="list-style-type: none"> •Ecosystems •Motion and Design •Sound 	<ul style="list-style-type: none"> •Aquatic Habitats •Bubble Festival •Space Science Sequence
5 th Grade	<ul style="list-style-type: none"> •Floating and Sinking •Land and Water •Magnets and Motors •Microworlds 	<ul style="list-style-type: none"> • Microscopic Explorations
6 th Grade	<ul style="list-style-type: none"> • Catastrophic Events • Earth in Space 	<ul style="list-style-type: none"> • Earth, Moon, and Stars • Ocean Currents • Plate Tectonics
7 th Grade	<ul style="list-style-type: none"> • Human Body Systems • Organisms–From Macro to Micro 	<ul style="list-style-type: none"> • Environmental Detectives
8 th Grade	<ul style="list-style-type: none"> • Energy, Machines, and Motion • Properties of Matter 	<ul style="list-style-type: none"> • Color Analyzers • Crime Lab Chemistry • Invisible Universe

CORRELATION TO THE GEORGIA PERFORMANCE STANDARDS

Subject Area: Science **State-Funded Course:** 41.01300 Science/Grade 2

Textbook Title: Science and Technology for Children® (STC®) and Great Explorations in Math and Science (GEMS®)

Publisher: Carolina Biological Supply Company

The Georgia Performance Standards for grades K-12 Science and 9-12 Mathematics may be accessed on-line at <http://www.georgiastandards.org/>.

<u>Standard</u> (Cite Number)	<u>Standard</u> (Cite specific standard)	<u>Where Taught</u> (If print component, cite page number; if non-print, cite appropriate location.)
<p>S2CS1. S2CS1.a.</p>	<p>Habits of Mind Raise questions about the world around them and be willing to seek answers to some of the questions by making careful observations and measurements and trying to figure things out.</p>	<p>STC® Changes TG: L01-L17 (pp3-158) Life Cycle of Butterflies TG: L01-L16 (pp3-96) Plant Growth and Development TG: L01-L17 (pp3-100)</p> <p>GEMS® Buzzing a Hive TG: Les01-6 (pp5-66) Involving Dissolving TG: Act01-4 (pp5-35)</p>
<p>S2CS2.a.</p>	<p>Use whole numbers in ordering, counting, identifying, measuring, and describing things and experiences.</p>	<p>STC® Plant Growth and Development TG: L15 (pp89-94)</p>
<p>S2CS2.b</p>	<p>Readily give the sums and differences of single-digit numbers in ordinary, practical contexts and judge the reasonableness of the answer.</p>	<p>STC® Plant Growth and Development TG: L15 (pp89-94)</p>

S2CS2.c.	Give rough estimates of numerical answers to problems before doing them formally.	STC® Changes TG: L02-L03 (pp21-42), L09 (pp85-94) L11 (pp103-110), L14 (pp129-136), L16 (pp147-154) Life Cycle of Butterflies TG: L04 (pp23-28), L07 Exts (p43), L08-10 (pp47-68) Plant Growth and Development TG: L01 (pp3-8), L07 (pp39-42), L11.Exts (p63) L16.Exts (pp96-97)
S2CS2.d.	Make quantitative estimates of familiar lengths, weights, and time intervals, and check them by measuring.	STC® Changes TG: L02-L03 (pp21-42), L09 (pp85-94) L11 (pp103-110), L14 (pp129-136), L16 (pp147-154) Life Cycle of Butterflies TG: L04 (pp23-28), L07 Exts (p43), L08-10 (pp47-68) L12 (pp75-80) Plant Growth and Development TG: L01 (pp3-8), L05 (pp29-34), L07 (pp39-42) L11.Exts (p63), L15-16 (pp89-97)
S2CS3. S2CS3.a.	Habits of Mind Use ordinary hand tools and instruments to construct, measure, and look at objects.	STC® Life Cycle of Butterflies TG: L01.Exts (p7), L02-L09 (pp11-62) L11.Exts (pp71-73), L12 (pp75-80), L14 (pp85-88) Plant Growth and Development TG: L01-L16 (pp3-98) GEMS® Buzzing a Hive TG: Les01-6 (pp5-66) Involving Dissolving TG: Act01-4 (pp5-35)
S2CS3.b.	Assemble, describe, take apart, and reassemble constructions using interlocking blocks, erector sets, and other things.	STC® Life Cycle of Butterflies TG: L11.Exts (pp71-73)
S2CS3.c.	Make something that can actually be used to perform a task, using paper, cardboard, wood, plastic, metal, or existing objects.	STC® Life Cycle of Butterflies TG: L11.Exts (pp71-73)

<p>S2CS4. S2CS4.a.</p> <p>S2CS4.b.</p> <p>S2CS4.c.</p> <p>S2CS4.d.</p>	<p>Habits of Mind Identify the parts of things, such as toys or tools, and identify what things can do when put together that they could not do otherwise.</p> <p>Use a model - such as a toy or a picture - to describe a feature of the primary thing.</p> <p>Describe changes in the size, weight, color, or movement of things, and note which of their other qualities remain the same during a specific change.</p> <p>Compare very different sizes, weights, ages (baby/adult), and speeds (fast/slow) of both human made and natural things.</p>	<p>STC® Life Cycle of Butterflies TG: L01-L16 (pp3-96) Plant Growth and Development TG: L01 (pp3-8)</p> <p>STC® Plant Growth and Development TG: L02.Exts (p11), L13-14 (pp71-98)</p> <p>GEMS® Buzzing a Hive TG: Exts (p67)</p> <p>STC® Changes TG: L01-L17 (pp3-158) Life Cycle of Butterflies TG: L05 (pp29-34)</p> <p>STC® Changes TG: L01.Exts (pp10-11), L02.Exts (pp26-27) L03 (pp31-42), L05 (pp53-62), L07-L09 (pp71-94) L12-L16 (pp111-154) Life Cycle of Butterflies TG: L10-11 (pp63-74) Plant Growth and Development TG: L09.Exts (p50)</p>
<p>S2CS5. S2CS5.a.</p> <p>S2CS5.b.</p>	<p>Habits of Mind Describe and compare things in terms of number, shape, texture, size, weight, color, and motion.</p> <p>Draw pictures (grade level appropriate) that correctly portray features of the thing being described.</p>	<p>STC® Changes TG: L01.Exts (pp10-11), L02.Exts (pp26-27) L03 (pp31-42), L05 (pp53-62), L07-L09 (pp71-94) L12-L16 (pp111-154) Plant Growth and Development TG: L09.Exts (p50)</p> <p>STC® Changes TG: L01 (pp3-20), L04.Exts (p48), L09 (pp85-94) L12.Exts (p116), L16 (pp147-154) Life Cycle of Butterflies</p>

S2CS5.c.	Use simple pictographs and bar graphs to communicate data.	<p>TG: App-B (pp101-110, L01 (pp3-10), L06-7 (pp35-46) L11.Exts (pp71-73), L13.Exts (p82) L16 (pp95-96) Plant Growth and Development TG: L02 (pp9-12), L04 (pp25-28), L12 (pp67-70)</p>
<p>S2CS6.</p> <p>S2CS6.b.</p>	<p>The Nature of Science Science involves collecting data and testing hypotheses.</p>	<p>STC® Changes TG: L01-L02 (pp3-30), L05-L17 (pp53-158) Plant Growth and Development TG: App-A (pp101-103), L01 (pp3-8), L05 (pp29-34) L07 (pp39-42), L12 (pp67-70), L15 (pp89-94)</p> <p>STC® Changes TG: L01-L17 (pp3-158) Life Cycle of Butterflies TG: L02 (pp11-18), L04 (pp23-28), L07.Exts (p43) L08-10 (pp47-68), L13 (pp81-84) Plant Growth and Development TG: L01-L16 (pp3-98)</p> <p>GEMS® Buzzing a Hive TG: Les01-6 (pp5-66) Involving Dissolving TG: Act01-4 (pp5-35)</p>
<p>S2CS7.</p> <p>S2CS7.a.</p> <p>S2CS7.c.</p>	<p>The Nature of Science Scientists use a common language with precise definitions of terms to make it easier to communicate their observations to each other.</p> <p>Tools such as thermometers, rulers, and balances often give more information about things than can be obtained by just observing things without help.</p>	<p>STC® Life Cycle of Butterflies TG: L01-L16 (pp3-96) Plant Growth and Development TG: L01 (pp3-8), L09-L10 (pp47-60), L13 (pp71-78)</p> <p>STC® Life Cycle of Butterflies TG: L01.Exts (p7), L02-L09 (pp11-62) L11.Exts (pp71-73), L12 (pp75-80), L14 (pp85-88) Plant Growth and Development TG: L02-L16 (pp9-98)</p> <p>GEMS® Buzzing a Hive TG: Les01-6 (pp5-66) Involving Dissolving TG: Act01-4 (pp5-35)</p>

S2CS7.d.	Much can be learned about plants and animals by observing them closely, but care must be taken to know the needs of living things and how to provide for them. Advantage can be taken of classroom pets.	STC® Life Cycle of Butterflies TG: L01-L16 (pp3-96) Plant Growth and Development TG: L01-L16 (pp3-98) GEMS® Buzzing a Hive TG: Les01-6 (pp5-66)
S2P1.	Physical Science	
S2P1.a.	Identify the three common states of matter as solid, liquid, or gas.	STC® Changes TG: L01 (pp3-20)
S2P1.b.	Investigate changes in objects by tearing, dissolving, melting, squeezing, etc.	STC® Changes TG: L01 (pp3-20), L03-L04 (pp31-52), .L12 (pp111-118) L17 (pp155-158)
S2L1.	Life Science	
S2L1.a.	Determine the sequence of the life cycle of common animals in your area: a mammal such as a cat or dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.	STC® Life Cycle of Butterflies TG: App-A (pp97-100), App-B (pp101-110) L01-L16 (pp3-96) KIDS DISCOVER-Butterflies GEMS® Buzzing a Hive TG: Les04 (pp39-53)
S2L1.b.	Relate seasonal changes to observations of how a tree changes throughout a school year.	STC® Plant Growth and Development TG: L01-L16 (pp3-98)
S2L1.c.	Investigate the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time	STC® Life Cycle of Butterflies TG: L08.Exts (pp49-50) Plant Growth and Development TG: L04-7 (pp25-42), L10 (pp55-60), L12 (pp67-70) L15-17(pp89-100)