Tennessee Science Standard Aligned to GLOBE

(Chart for Individual Standards by GLOBE Investigation Areas located at end of page.)

Kindergarten

- GLE 0007.Inq.1 Observe the world of familiar objects using the senses and tools.
- GLE 0007.Inq.2 Ask questions, make logical predictions, plan investigations, and represent data
- GLE 0007.Inq.3 Explain the data from an investigation.
- GLE 0007.2.2 Know that people interact with their environment through their senses.
- GLE 0007.4.1 Observe how plants and animals change as they grow.
- GLE 0007.5.1 Compare the basic features of plants and animals.
- GLE 0007.6.1 Know the different objects that are visible in the day and night sky.
- GLE 0007.7.1 Identify non-living materials found on the surface of the earth.
- GLE 0007.8.2 Collect daily weather data at different times of the year.

Grade One

- GLE 0107.Inq.1 Observe the world of familiar objects using the senses and tools.
- GLE 0107.Inq.2 Ask questions, make logical predictions, plan investigations, and represent data
- GLE 0107.Inq.3 Explain the data from an investigation.
- GLE 0107.1.2 Use tools to examine major body parts and plant structures.
- GLE 0107.3.1 Recognize that plants and animals are living things that grow and change over time.
- GLE 0107.4.1 Observe and illustrate the life cycle of animals.
- GLE 0107.6.1 Compare and describe features of the day and night sky.
- GLE 0107.7.1 Realize that water, rocks, soil, living organisms, and man-made objects make up the Earth's surface.
- GLE 0104.7.2 Classify earth materials according to their physical properties.

- GLE 0104.8.1 Gather and interpret daily weather data.

Grade Two

- GLE 0207.Inq.1 Observe the world of familiar objects using the senses and tools.
- GLE 0207.Inq.2 Ask questions, make logical predictions, plan investigations, and represent data.
- GLE 0207.Inq.3 Explain the data from an investigation.
- GLE 0207.2.1 Investigate the habitats of different kinds of local plants and animals.
- GLE 0207.4.1 Compare the life cycles of various organisms.
- GLE 0207.7.1 Compare and record the components of a variety of soil types.
- GLE 0207.8.1 Associate temperature patterns with seasonal changes.
- GLE 0207.9.1 Use tools to observe the physical properties of objects.

Grade Three

- GLE 0307.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data.<
- GLE 0307.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation.
- GLE 0307.Inq.3 Organize data into appropriate tables, graphs, drawings or diagrams.
- GLE 0307.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations.
- GLE 0307.Inq.5 Recognize that people may interpret the same results in different ways.
- GLE 0307.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems.
- GLE 0307.1.1 Use magnifiers to make observations of specific plant and animal body parts and describe their functions.
- GLE 0307.4.1 Identify the different life stages through which plant and animals pass.
- GLE 0307.8.1 Recognize that there are a variety of atmospheric conditions that can be measured.

- GLE 0307.8.2 Use tools such as the barometer, thermometer, anemometer, and rain gauge to measure atmospheric conditions.
- GLE 0307.8.3 Identify cloud types associated with particular atmospheric conditions.
- GLE 0307.8.4 Predict the weather based on cloud observations.

Grade Four

- GLE 0407.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data.
- GLE 0407.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation.
- GLE 0407.Inq.3 Organize data into appropriate tables, graphs, drawings, or diagrams.
- GLE 0407.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations.
- GLE 0407.Inq.5 Recognize that people may interpret the same results in different ways.
- GLE 0407.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems.
- GLE 0407.8.1 Recognize the major components of the water cycle
- GLE 0407.8.2 Differentiate between weather and climate.
- GLE 0407.10.2 Investigate how light travels and is influenced by different types of materials and surfaces.

Grade Five

- GLE 0507.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data.
- GLE 0507.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation.
- GLE 0507.Inq.3 Organize data into appropriate tables, graphs, drawings, or diagrams.
- GLE 0507.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations.
- GLE 0507.Inq.5 Recognize that people may interpret the same results in different ways.

- GLE 0507.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems.
- GLE 0507.5.1 Investigate physical characteristics associated with different groups of animals.

Grade Six

- GLE 0607.Inq.1 Design and conduct open-ended scientific investigations.
- GLE 0607.Inq.2 Use appropriate tools and techniques to gather, organize, analyze and interpret data.
- GLE 0607.Inq.3 Synthesize information to determine cause and effect relationships between evidence and explanations.
- GLE 0607.Inq.4 Recognize possible sources of bias and error, alternative explanations, and questions for further exploration.
- GLE 0607.Inq.5 Communicate scientific understanding using descriptions, explanations, and models.
- GLE 0607.8.1 Design and conduct an investigation to determine how the sun drives atmospheric convection.
- GLE 0607.8.4Analyze meteorological data to predict weather conditions.

Grade Seven

- GLE 0707.Inq.1 Design and conduct open-ended scientific investigations.
- GLE 0707.Inq.2 Use appropriate tools and techniques to gather, organize, analyze and interpret data.
- GLE 0707.Inq.3 Synthesize information to determine cause and effect relationships between evidence and explanations.
- GLE 0707.Inq.4 Recognize possible sources of bias and error, alternative explanations, and questions for further exploration.
- GLE 0707.Inq.5 Communicate scientific understanding using descriptions, explanations, and models.

Grade Eight

- GLE 0807.Inq.1 Design and conduct open-ended scientific investigations.

- GLE 0807.Inq.2 Use appropriate tools and techniques to gather, organize, analyze and interpret data.
- GLE 0807.Inq.3 Synthesize information to determine cause and effect relationships between evidence and explanations.
- GLE 0807.Inq.4 Recognize possible sources of bias and error, alternative explanations, and questions for further exploration
- GLE 0807.Inq.5 Communicate scientific understanding using descriptions, explanations, and models.
- GLE 0807.5.1 Identify various criteria used to classify organisms into groups.
- GLE 0807.9.5 Apply the chemical properties of the atmosphere to illustrate a mixture of gases.

Biology

- CLE 3210.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts, and compare opposing theories.
- CLE 3210.Inq.3 Use appropriate tools and technology to collect precise and accurate data.
- CLE 3210.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias.
- CLE 3210.Inq.6 Communicate and defend scientific findings.
- CLE 3210.2.4 Describe the sequence of events associated with biological succession.

Chemistry

- CLE 3221.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts, and compare opposing theories.
- CLE 3221.Inq.3 Use appropriate tools and technology to collect precise and accurate data.<
- CLE 3221.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias.
- CLE 3221.Inq.6 Communicate and defend scientific findings.

Earth Science

- CLE 3204.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts and compare opposing theories.
- CLE 3204.Inq.3 Use appropriate tools and technology to collect precise and accurate data.
- CLE 3204.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias.
- CLE 3204.Inq.6 Communicate and defend scientific findings.
- CLE 3204.3.3 Analyze the hydrologic cycle.
- CLE 3204.3.4 Interpret data related to the atmospheric cycle.
- CLE 3204.3.6 Differentiate among the geochemical cycles.
- CLE 3204.3.8 Relate earth system cycles to past and current patterns of global change.

Environmental Science

- CLE 3260.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts and compare opposing theories.
- CLE 3260.Inq.3 Use appropriate tools and technology to collect precise and accurate data.
- CLE 3260.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias.
- CLE 3260.Inq.6 Communicate and defend scientific findings.
- CLE 3260.1.4 Relate the atmosphere, hydrosphere, and lithosphere to the biosphere.
- CLE 3260.2.4 Distinguish between primary and secondary biological succession using common plants and animals.
- CLE 3260.6.1 Investigate the causes, environmental effects, and methods for controlling/preventing land, air and water pollution.

Physical Science

- CLE 3202.Inq.2 Design and conduct scientific investigations to explore new phenomena, verify previous results, test how well a theory predicts and compare opposing theories.
- CLE 3202.Inq.3 Use appropriate tools and technology to collect precise and accurate data.
- CLE 3202.Inq.4 Apply qualitative and quantitative measures to analyze data and draw conclusions that are free of bias

- CLE 3202.Inq.6 Communicate and defend scientific findings
- CLE 3202.1.10 Distinguish among acids, bases, and neutral substances.

GLE #	Atmosphere	Hydrology	Soil	Land Cover/Biology	Earth as a System
Kindergarten					
0007.Inq.1	x	x	x	x	x
0007.Inq.2	x	x	x	x	x
0007.Inq.3	x	x	x	x	x
0007.2.2	x	x	x	x	x
0007.4.1				x	x
0007.5.1				x	x
0007.6.1	x				
0007.7.1			x		
0007.8.2	x				
Grade 1					
0107.Inq.1	x	x	x	x	x
0107.Inq.2	x	x	x	x	x
0107.Inq.3	x	x	x	x	x
0107.1.2					x
0107.3.1				x	x
0107.3.1				x	x
0107.4.1					x
0107.6.1	x				
0107.7.1			x	x	
0107.7.2			x	x	
0107.8.1	x				
Grade 2					
0207.Inq.1	x	x	x	x	x
0207.Inq.2	x	x	x	x	x
0207.Inq.3	x	x	x	x	x

0207.2.1				x	x
0207.4.1				x	x
0207.7.1			x		
0207.8.1	x				
0207.9.1	x		x		x
Grade 3					
0307.Inq.1	x	x	x	x	x
0307.Inq.2	x	x	x	x	x
0307.Inq.3	x	x	x	x	x
0307.Inq.4	x	x	x	x	x
0307.Inq.5	x				
0307.T/E.1	x				
0307.1.1				x	x
0307.4.1				x	x
0307.8.1	x				
0307.8.2	x				
0307.8.3	x				
0307.8.4	x				
Grade 4					
0407.Inq.1	x	x	x	x	x
0407.Inq.2	x	x	x	x	x
0407.Inq.3	x	x	x	x	x
0407.Inq.4	x	x	x	x	x
0407.Inq.5	x				
0407.T/E.1	x				
0407.8.1	x				
0407.8.2	x				
0407.10.2	x				
Grade 5					
0507.Inq.1	x	x	x	x	x
0507.Inq.2	x	x	x	x	x
0507.Inq.3	x	x	x	x	x

0507.Inq.4	x	x	x	x	x
0507.Inq.5	x				
0507.T/E.1	x				
0507.5.1					x
Grade 6					
0607.Inq.1	x	x	x	x	x
0607.Inq.2	x	x	x	x	x
0607.Inq.3	x	x	x	x	x
0607.Inq.4	x				
0607.Inq.5	x	x	x	x	x
0607.8.1	x				
0607.8.4	x				
Grade 7					
0707.Inq.1	x	x	x	x	x
0707.Inq.2	x	x	x	x	x
0707.Inq.3	x	x	x	x	x
0707.Inq.4	x				
0707.Inq.5	x	x	x	x	x
Grade 8					
0807.Inq.1	x	x	x	x	x
0807.Inq.2	x	x	x	x	x
0807.Inq.3	x	x	x	x	x
0807.Inq.4	x				
0807.Inq.5	x	x	x	x	x
0807.5.1					x
0807.9.5	x				
CLE #	**Atmosphere**	**Hydrology**	**Soil**	**Land Cover/ Biology**	**Earth as a System**
Biology					
3210.Inq.2	x	x	x	x	x
3210.Inq.3	x				
3210.Inq. 4	x	x	x	x	x

3210.Inq.6	x	x	x	x	x
3210.2.4				x	
Chemistry					
3221.Inq.2	x	x	x	x	x
3221.Inq.3	x	x	x	x	x
3221.Inq.4	x	x	x	x	x
3221.Inq.6	x	x	x	x	x
Earth Science					
3204.Inq.2	x	x	x	x	x
3204.Inq.3	x	x	x	x	x
3204.Inq.4	x	x	x	x	x
3204.Inq.6	x	x	x	x	x
3204.3.3		x			
3204.3.4	x				
3204.3.6					x
3204.3.8					x
Environmental Science					
3260.Inq.2	x	x	x	x	x
3260.Inq.3	x	x	x	x	x
3260.Inq.4	x	x	x	x	x
3260.Inq.6	x	x	x	x	x
3260.1.4					x
3260.2.4				x	
3260.6.1				x	
Physical Science					
3202.Inq.2	x	x	x	x	x
3202.Inq.3	x	x	x	x	x
3202.Inq.4	x	x	x	x	x
3202.Inq.6	x	x	x	x	x
3202.1.10		x			