

Name	School	Grade	Course/Subject	Number of Students	Interval of Instruction
		4	Science Content		September 2018 to March 2019

Standards, Rationale, and Assessment Method

Name the content standards covered, state the rationale for how these standards are critical for the next level of the subject, other academic disciplines, and/or life/college/career. Name and briefly describe the format of the assessment method.

NEW JERSEY CORE CURRICULUM CONTENT STANDARDS – SCIENCE K-12

5.1 Science Practices: Science is both a body of knowledge and an evidence-based, model-building enterprise that continually extends, refines, and revises knowledge. The four Science Practices strands encompass the knowledge and reasoning skills that students must acquire to be proficient in science.

Strand A. Understand Scientific Explanations; **Strand B.** Generate Scientific Evidence Through Active Investigations; **Strand C.** Reflect on Scientific Knowledge; **and Strand D.** Participate Productively in Science

5.2 Physical Science: Physical science principles, including fundamental ideas about matter, energy, and motion, are powerful conceptual tools for making sense of phenomena in physical, living, and Earth systems science.

Strand A. Properties of Matter; **Strand B.** Changes in Matter; **Strand C.** Forms of Energy; **Strand D.** Energy Transfer and Conservation; **and Strand E.** Forces and Motion

5.3 Life Science: All students will understand that life science principles are powerful conceptual tools for making sense of the complexity, diversity, and interconnectedness of life on Earth. Order in natural systems arises in accordance with rules that govern the physical world, and the order of natural systems can be modeled and predicted through the use of mathematics.

Strand A. Organization and Development; **Strand B.** Matter and Energy Transformations; **Strand C.** Interdependence; **and Strand E.** Evolution and Diversity

5.4 Earth Systems Science: All students will understand that Earth operates as a set of complex, dynamic, and interconnected systems, and is a part of the all-encompassing system of the universe.

Strand A. Objects in the Universe; **Strand E.** Energy in Earth Systems; **and Strand G.** Biogeochemical Cycles

In alignment with this standard, as outlined by the Next Generation Science Standards, in the fourth grade performance expectations, students are expected to demonstrate grade-appropriate proficiency in asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information. Students are expected to use these practices to demonstrate understanding of the core ideas.

Rational

This SGO includes the NJCCCS related to components of Physical, Earth and Life Science addressed in 3rd Grade. It encompasses the key foundational understandings that students must have to support content competency and progression. The SGO also includes the science practice standards crucial to helping student become scientific thinkers.

Assessment Method

Authentic Assessments throughout the year will be used to measure students’ growth. The assessments will consist of selected content understanding task and science practices tasks that reflect higher levels of cognitive complexity. All tasks/assessments will be maintained in an assessment portfolio.

Starting Points and Preparedness Groupings

Students will be tiered as determined by a data point systems the uses 3 points of data. Each tier group will be assigned a target level.

Data Measures used to Establish Baselines

2017-2018 Final Grade; weight (.35)

Science Pre-Assessment; weight (.35)

Unit 1 Lab; weight (.30)

Preparedness Group	Baseline Score
Tier 1	< 0.35
Tier 2	0.35 – 0.55
Tier 3	0.55 – 0.75
Tier 4	>0.75

Student Growth Objective

By March 2019, 70% of students in each preparedness group will meet their assigned target command level for full attainment of the objective as shown in the scoring plan.

Preparedness Group (e.g. 1,2,3)	Number of Students in Each Group	Target Level of SGO Combined Assessments
Tier 1		2
Tier 2		3
Tier 3		4
Tier 4		4 or 5 ¹

Scoring Plan

State the projected scores for each group and what percentage/number of students will meet this target at each attainment level. Modify the table as needed.

Preparedness Group	Student Target Command Level	Teacher SGO Score Based on Percent of Students Achieving Target Score			
		Exceptional (4) >80%	Full (3) 70-80%	Partial (2) 50-69%	Insufficient (1) <50%
Tier 1	2				
Tier 2	3				
Tier 3	4				
Tier 4	4 or 5 ¹				

¹ It is expected that students in Tier 4 maintain a level of strong command or grow to distinguished command.

Approval of Student Growth Objective

Administrator approves scoring plan and assessment used to measure student learning.

Teacher _____	Signature _____	Date Submitted _____
Evaluator _____	Signature _____	Date Approved _____

Results of Student Growth Objective

Summarize results using weighted average as appropriate. Delete and add columns and rows as needed.

Preparedness Group	Students at Target Score	Teacher SGO Score	Weight (based on students per group)	Weighted Score	Total Teacher SGO Score
Tier 1					
Tier 2					
Tier 3					
Tier 4					

Notes

Describe any changes made to SGO after initial approval, e.g. because of changes in student population, other unforeseen circumstances, etc.

Review SGO at Annual Conference

Describe successes and challenges, lessons learned from SGO about teaching and student learning, and steps to improve SGOs for next year.

Teacher _____ Signature _____ Date _____

Evaluator _____ Signature _____ Date _____