

SCIENCE.4.2.B	analyze <u>data by identifying any significant features</u> patterns, <u>or sourcesof error</u> ;	4.2.D	analyz eand interpret patternsto constructreasonablexplanationsfrom data that can be observedandmeasured	TheKnowledgeand Skillstatement4.3 wasdeveloped for explanations.
SCIENCE.4.2.C	usemathematicalculationsto comparepatternsand relationships and			
SCIENCE.4.2.D	evaluatea designor object usingcriteria.	4 .2E	perform repeated investigation to increase the reliability of results; and	
SCIENCE.4.3	Scientificand engineeringpractices.Thestudent developsevidencerbased explanationsand communicates indings.conclusionsand proposed solutions.The student is expected to:			
SCIENCE.4.3.A	developexplanationsand proposes olutions supported by data and models	4.2.D	analyzeand interpret patternste_constructreasonableexplanationsfrom data that can be observedand measured	Analyzingand interpreting data have been moved into 4.2.B.
SCIENCE.4.3.B	communicateexplanationsand solutions individually and collaboratively in a variety of settings and formats; and	4.2.F	communicatevalidoral and written results supported by data.	Studentsare now beingasked to communicate not only asscientists but also as engineers.
SCIENCE.4.3.C	listen activelyto others' explanationsto identify relevant evidence and engage respectfully in scientific discussion	4.3.A	a nalyzopvaluate,and critique scientifi cexplanations by usin gevidence ,logical reasoning,and experimentaland observationalesting;	
SCIENCE.4.4	Scientificand engineering ractices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:	4.3.C	connectgraderlevebppropriatescienceconceptswith the history of sciencescience careers; and contributions of scientists.	
SCIENCE.4.4.A	explainhow scientificdiscoveriesand innovative solutions to problem simpact science and society: and			
SCIENCE.4.4.B	researchand exploreresourcesouch as museums libraries, professional organizations private companies on line platforms, and mentors employed in a science technology, engineering and mathematics (STEM field to investigate STEM free rest.			
SCIENCE.4.5	Recurring hemes and concepts. The student understands that recurring themes and concepts provide a framework for making connection sacross disciplines. The student is expected to:			
SCIENCE.4.5.A	identify and usepatterns to explain scientific phenomenaor to design solutions:			
SCIENCE.4.5.B	identify and investigate cause randeffect relationships to explain scientific phenomen aor analyze problems;			
SCIENCE.4.5.C	usescale.proportion, and quantity to describe.compare.or model different. svstems;			
SCIENCE.4.5.D	examineand model the parts of a systemand their interdependencen the function of the system;			
SCIENCE.4.5.E	investigate the flow of energy and cycling of matter through systems;			
SCIENCE.4.5.F	explainthe relationshipbetweenthe structure and function of objects.organisms, and systems and			
SCIENCE.4.5.G	explainhow factorsor conditionsimpact stability and changein objects.organisms, and systems take 99 and 10 ft () TJ /TT1_0 1 Tfc(factors) Tj /T1_0 1 Tf () Tj /TT1	1 Tf 3.035 0 Td (si9_	0 1 Tf ()Tj /TT1 1 Tf 3.146 0 Tdbeg 0 Td 283)Tj /TT1 a0 1 Tf ()Tj /TT1 1 Tf 3.035	0 TTf