2021 Knowledge and

SCIENCE.3.2	Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence based arguments or evaluate designs. The student is expected to:	3.3	Scientific investigation and reasoning. The student knows that information, critical thinking, - scientific problem solving, and the contributions of scientists are used in making decisions The student is expected to:	
SCIENCE.3.2.A	of ot.4tTT4s285jf346ef3292ef2003tudent2298720097ffo8ag.u9ef6 identify advantages and limitations of models such as their size, scale, i properties, and materials:	9 5€j 7 T4no 5 j 79(⊅	decofstifie&vidence)Tj7T3Tf3. 6%82 TT4Tf23.4&%BQexplanations.)Tj82&fc7T4Tref 6%Q eT(39.4&e2(@T	(Tj7T2Tf&.2694(\$CIT@5j7T87f.2and)Tj7T2TfTjs7At2and)3TT4Tf.226(\$tudent)Tj7T3Tf3.3
SCIENCE.3.2.B	analyze data <u>by identifying any significant features, i</u> patterns, <u>or sources.</u> <u>of 'error</u> ;	3.2.D	analyze a nd interpret patterns in data to construct reasonable explanations based on evidence from investigations ;	The Knowledge and Skill statement 3.3 was developed for explanations.
SCIENCE.3.2.C	use mathematical calculations to compare patterns and relationships ; and			
SCIENCE.3.2.D	evaluate a design or object using criteria.	<u>з.2.Е</u>	demonstrate "that "repeated "investigations may "increase "the 'reliability 'of 'results; 'and-	
SCIENCE.3.3	Scientific and engineering practices. The student develops evidence based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:			
SCIENCE.3.3.A	develop explanations and propose solutions supported by data and models;	3.2.D	analyze and "interpret patterns "in data to construct reasonable explanations based on " evidence from investigations;	Analyzing and interpreting data have been moved into 3.2.B.
SCIENCE.3.3.B	communicate <u>explanations and solutions individually and collaboratively</u> in a variety of settings and formats: and	3.2.F	communicate valid conclusions in both written and verbal forms; and	Students are now being asked to communicate not only as scientists but also as engineers.
SCIENCE.3.3.C	listen actively to others' explanations to identify relevant evidence and engage respectfully in scientific discussion.	3.3.A	analyze, 'evaluate, 'and 'critique'scientific 'explanations' by 'using 'evidence, <mark>logical 'reasoning, '</mark> and 'experimental 'and 'observational 'testing';	
	Scientific and engineering practices. The student knows the contributions			

SCIENCE.3.4 of scientists and

SCIENCE.3.5.C

SCIENCE.3.8.B

SCIENCE.3.12.D identify

