

Appendix C
CMAS Science
Prepared Graduate Statements and
Grade Level Expectations

**Grade 5 Science
Standards, Prepared Graduate Statements, and Grade Level Expectations**

1	Physical Science
PG 1	Structure, properties, and interactions of matter
GLE 1	Matter exists as particles too small to be seen; properties can be used to identify materials
GLE 2	Chemical reactions and the Law of Conservations of Mass
GLE 3	Gravity
2	Physical/Life Science
PG 1	Structure, properties, and interactions of matter
GLE 4	Energy from food was once energy from sun
PG 6	How living systems interact with the environment
GLE 2	Plants get most of their material for growth from air and water
GLE 1	Matter cycles between air and soil; organisms live and die
3	Earth and Space Science
PG 9	The universe and Earth’s place in it
GLE 1	Earth’s major systems interact in multiple ways
GLE 2	Interactions between Earth’s orbit and the moon’s orbit
PG 10	How and why Earth is constantly changing
GLE 3	Earth’s major systems interact in multiple ways
GLE 4	Earths major water is in the ocean and much of Earth’s freshwater is in glaciers or underground
GLE 5	Societal activities have major effects on land, ocean, atmosphere, and even outer space

**Grade 8 Science
Standards and Prepared Graduate Statements**

1	Physical Science
PG 1	Structure, properties, and interactions of matter
PG 2	Interactions between objects and within systems of objects
PG 3	How energy is transferred and conserved
PG 4	Waves are used to transfer energy and information
2	Life Science
PG 5	How structures of living things function to support life, growth, behavior, and reproduction
PG 6	How living systems interact with the environment
PG 7	How genetic and environmental factors influence variation of organisms across generations
PG 8	Fossil records, genetic variation, how organisms adapt to different environments, and biodiversity
3	Earth and Space Science
PG 9	The universe and Earth's place in it
PG 10	How and why Earth is constantly changing
PG 11	How human activities and Earth's surface processes interact

**Grade 11 Science
Standards and Prepared Graduate Statements**

1	Physical Science
PG 1	Structure, properties, and interactions of matter
PG 2	Interactions between objects and within systems of objects
PG 3	How energy is transferred and conserved
PG 4	Waves are used to transfer energy and information
2	Life Science
PG 5	How structures of living things function to support life, growth, behavior, and reproduction
PG 6	How living systems interact with the environment
PG 7	How genetic and environmental factors influence variation of organisms across generations
PG 8	Fossil records, genetic variation, how organisms adapt to different environments, and biodiversity
3	Earth and Space Science
PG 9	The universe and Earth's place in it
PG 10	How and why Earth is constantly changing
PG 11	How human activities and Earth's surface processes interact