Science, Grade 3

Subject: Science
Grade: 03
Num Expectations: 45
Num Breakouts: 174

Introduction.

(1) In Kindergarten through Grade 5 Science, content is organized into recurring strands. The concepts within each grade level build on prior knowledge, prepare students for the next grade level, and establish a foundation for high school courses. In Grade 3, the following concepts will be addressed in each strand.

(A) Scientific and engineering practices. Scientific inquiry is the planned and deliberate investigation of the natural world using in8 (p) 0 0 w 6.canned

Breakouts

(i) demonstrate safe practices during classroom investigations as outlined in Texas Education Agency-approved safety standards

(ii) demonstrate the use of safety equipment during classroom investigations as outlined in Texas Education Agency-approved

(vii) construct appropriate graphic organizers to collect data, including flow charts or sequence maps

(viii) construct appropriate graphic organizers to collect data, including input-output tables that show cause and effect

(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.

(ii) investigate the cycling of matter through systems

(F) explain the relationship between the structure and function of objects, organisms, and systems; and

Breakouts

(i) explain the relationship between the structure and function of objects

(ii) explain the relationship between the structure and function of organisms

(iii) explain the relationship between the structure and function of systems

(G) explain how factors or conditions impact stability and change in objects, organisms, and systems.

Breakouts

(i) explain how factors or conditions impact stability in objects

(ii) explain how factors or conditions impact stability in organisms

(iii) explain how factors or conditions impact stability systems

(iv) explain how factors or conditions impact change in objects

(v) explain how factors or conditions impact change in organisms

(vi) explain how factors or conditions impact change in systems

(6) Matter and energy. The student knows that matter has measurable physical properties that determine how matter is identified, classified, changed, and used. The student is expected to:

(A) measure, test, and record physical properties of matter, including temperature, mass, magnetism, and the ability to sink or float in water;

Breakouts

(i) measure physical properties of matter, including temperature

(ii) measure physical properties of matter, including mass

(iii) measure physical properties of matter, including magnetism

(iv) measure physical properties of matter, including the ability to sink or float in water

(v) test physical properties of matter, including temperature

(vi) test physical properties of matter, including mass

(vii) test physical properties of matter, including magnetism

(viii) test physical properties of matter, including the ability to sink or float in water

(ix) record physical properties of matter, including temperature

(x) record physical properties of matter, including mass

(xi) record physical properties of matter, including magnetism

(xii) record physical properties of matter, including the ability to sink or float in water

(ii) demonstrate forces acting on an object in contact or at a distance, including gravity

(iii) demonstrate forces acting on an object in contact or at a distance, including pushes

(iv) demonstrate forces acting on an object in contact or at a distance, including pulls

(v) describe forces acting on an object in contact or at a distance, including magnetism

(vi) describe forces acting on an object in contact or at a distance, including gravity

(vii) describe forces acting on an object in contact or at a distance, including pushes

(viii) describe forces acting on an object in contact or at a distance, including pulls

(B) plan and conduct a descriptive investigation to demonstrate and explain how position and motion can be changed by pushing and pulling objects such as swings, balls, and wagons.

Breakouts

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