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| §112.34. Biology, Beginning with School Year 2010-2011 |
| Topic | **Simulation** | **TEKS (Biology)**  |
| Diversity of Life | Natural Selection | B.7D, B.7E, B.7F, B.11B, B.11D |
| Genetics | Gene Expression – The Basics | B.6D |

Note: Full TEKS can be found at <http://ritter.tea.state.tx.us/rules/tac/chapter112/>

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| §112.35. Chemistry, Beginning with School Year 2010-2011 |
| Topic | **Simulation** | **TEKS (Chemistry)**  |
| Atoms and Molecules | Build a Molecule | C.7B |
| Build an Atom | C.6E |
| Isotopes and Atomic Mass | C.6D |
| Models of the Hydrogen Atom | C.6A |
| Molecules and Light | C.6B |
| Molecule Shapes | C.7E |
| Molecule Shapes: Basics | C.7E |
| Photoelectric Effect | C.6B |
| Rutherford Scattering | C.6A |
| Chemical Reactions | Balancing Chemical Equations | C.8D |
| Reactions & Rates | C.11A, C.11B |
| Reactants, Products and Leftovers | C.8E |
| Reversible Reactions | C.11B, C.11C |
| Behavior of Gases | Balloons and Buoyancy | C.9A |
| Gas Properties | C.9A |
| Solutions | Acid-Base Solutions | C.10G, C.10I |
| Beer’s Law Lab | C.10B, C.10C, C.10E |
| Concentration | C.10B, C.10C, C.10E |
| Molarity | C.10C, C.10D |
| pH Scale | C.10I |
| pH Scale: Basics | C.10I |
| Salts & Solubility | C.10A |
| Sugar and Salt Solutions | C.10C |
| Nuclear Chemistry | Alpha Decay | C.12A |
| Beta Decay | C.12A |
| Nuclear Fission | C.12C |
| Radioactive Dating Game | C.12B |
| Characteristics of Matter | States of Matter | C.4C |
| States of Matter: Basics | C.4C |

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| §112.39. Physics, Beginning with School Year 2010-2011 |
| Topic | **Simulation** | **TEKS (Physics)**  |
| Motion | Balancing Act | P.3F |
| Forces and Motion | P.4A, P.4B, P.4D, P.4E |
| Forces and Motion: Basics | P.4B, P.4D, P.4E |
| Forces in 1 Dimension | P.4A, P.4B, P.4D, P.4E |
| Gravity and Orbits | P.4C, P.5B |
| Gravity Force Lab | P.4D, P.5B |
| Ladybug Motion 2D | P.4B, P.4C |
| Ladybug Revolution  | P.4C |
| Lunar Lander | P.5B |
| Masses and Springs | P.4B, P.6A, P.6B, P.6D |
| Maze Game | P.4B  |
| Motion in 2D | P.4B, P.4C |
| The Moving Man | P.4A, P.4B |
| My Solar System | P.4C, P.5B |
| Projectile Motion | P.4C |
| The Ramp | P.4A, P.4D, P.4E |
| Ramp: Forces and Motion | P.4A, P.4D, P.4E |
| Torque  | P.4C |
| Waves | Fourier: Making Waves | P.7B, P.7D |
| Microwaves | P.7C |
| Normal Modes | P.7B |
| Pendulum Lab | P.7A |
| Radio Waves and Electromagnetic Fields | P.7C |
| Resonance | P.7B, P.7D |
| Sound | P.7A, P.7B, P.7D |
| Wave Interference | P.7A, P.7B, P.7C, P.7D |
| Wave on a String | P.7A, P.7B, P.7C |
| Bending Light | P.7D |
| Color Vision | P.7C |
| Geometric Optics | P.7E |
| Conservation of Energy and Momentum | Energy Forms and Changes | P.6D, P.6E, P.6F |
| Energy Skate Park | P.6B |
| Energy Skate Park: Basics | P.6B |
| Collision Lab | P.4B, P.6D |
| Balloons & Buoyancy | P.6D, P.6E, P.6F, P.6G |
| Friction | P.6E |
| Gas Properties | P.6D, P.6E, P.6F, P.6G |
| States of Matter  | P.6E, P.6F, P.6G |
| States of Matter: Basics | P.6E, P.6F, P.6G |
| Quantum Phenomena | Lasers | P.8D |
| Neon Lights & Other Discharge Lamps | P.8C |
| Nuclear Fisson | P.8C |
| Photoelectric Effect | P.8A |
| Simplified MRI | P.7F, P.8D |
| Electricity, Magnets and Circuits | Balloons and Static Electricity | P.5C, P.5D |
| Battery-Resistor Circuit | P.5F  |
| Capacitor Lab | P.5F  |
| Circuit Construction Kit (all) | P.5E, P.5F |
| Conductivity | P.5E |
| Electric Field Hockey | P.5C |
| Faraday's Electromagnetic Lab | P.5G |
| Faraday's Law | P.5G |
| Generator | P.5G |
| John Travoltage | P.5C |
| Magnets and Electromagnets | P.5G |
| Ohm's Law | P.5F  |
| Resistance in a Wire | P.5F  |