

## Vertical Alignment of Energy Transfer

TEKS in Focus highlights key concepts and student expectations to assist educators in implementing the science Texas Essential Knowledge and Skills (TEKS). The vertical progression of a concept within the science TEKS is provided along with a side-by-side view of the changes implemented in 2024.

### Elementary School

Level of Study	Prior Science TEKS	TEKS Implemented in 2024
Kindergarten	_____	_____
Grade 1	1.5.B predict and identify changes in materials caused by heating and cooling;	1.6.B explain and predict changes in materials caused by heating and cooling; and
Grade 2	2.6.C trace and compare patterns of movement of objects such as sliding, rolling, and spinning over time.	2.7.A explain how objects push on each other and may change shape when they touch or collide; and  2.7.B plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object's motion.
Grade 3	3.5.C predict, observe, and record changes in the state of matter caused by heating or cooling such as ice becoming liquid water, condensation forming on the outside of a glass of ice water, or liquid water being heated to the point of becoming water vapor;	3.6.C predict, observe, and record changes in the state of matter caused by heating or cooling in a variety of substances such as ice becoming liquid water, condensation forming on the outside of a glass, or liquid water being heated to the point of becoming water vapor (gas); and
Grade 4	4.6.A differentiate among forms of energy, including mechanical, sound, electrical, light, and thermal;  4.6.C demonstrate that electricity travels in a closed path, creating an electrical circuit.	4.8.A investigate and identify the transfer of energy by objects in motion, waves in water, and sound;  4.8.C demonstrate and describe how electrical energy travels in a closed path that can produce light and thermal energy.
Grade 5	5.5.A classify matter based on measurable, testable, and observable physical properties, including mass, magnetism, physical state (solid, liquid, and gas), relative density (sinking and floating using water as a reference point), solubility in water, and the ability to conduct or insulate thermal energy or electric energy;  5.6.A explore the uses of energy, including mechanical, light, thermal, electrical, and sound energy;  5.6.B demonstrate that the flow of electricity in closed circuits can produce light, heat, or sound;	5.6.A compare and contrast matter based on measurable,

Middle School

