Content Vocabulary to Clarify Science Learning **TECHNOLOGY AND PHYSICS**

The list is organized by topics.
Each grade's topics and terms correlate with the State Standards and Chicago Academic Framework.
The words for grades K-2 include the Fry 300 High Frequency Words.
Students in grades 5-8 may need also to review the words from earlier grades.
Students should illustrate the vocabulary and use it to make oral and written presentations to communicate what they learn about technology and physics.

K	*Physical properties* color is see shape	*Compare solids* big shape size small	*Compare solids and liquids* all drink wet	*Compare solids, liquids and gases* air gas solid
Grade 1	*Describe size, taste, texture* feel small smell	*Solids, liquids and gases* point see shape water	*What makes light* around light made watch	*What makes heat?* cold cool hot warm
Grade 2	*What things are made from* natural paper rock wood	*Measure size* foot inches mile tall walk	*Compare things* begin kind many something	*Classify things* large little long metal wood
Grade 3	*Explore and explain simple machines* function invention machine mechanical simple machine work	*Explore and explain simple machines* effort fulcrum gravity inclined plane lever pull slope	*Explore and explain simple machines* balance energy force friction motion pulley wheel	*Explore and explain simple machines* energy focus friction wheel and axle
Grade 4	*Explore and explain simple machines* fulcrum inclined plane lever machine pulley simple machine wheel and axle	*Read and write about simple machines* balance friction gravity inertia pull push slope	*Read and write about energy and friction* acceleration deceleration energy energy transfer friction gravity heat insulator magnet magnetism motion temperature	*What affects heat?* Celsius degree Fahrenheit friction insulator

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Grade 5	*Read and write about heat, light and sound* Celsius degree expand Fahrenheit heat prism radiant solid temperature thermostat wave	*Read and write about energy and motion* conductor force friction fuel energy gravity magnet magnetic motion power rate sound	*Read and write about flight* Bernoulli's principle drag lift mass mechanical thrust velocity	*Read and write about heat and light* absorption conduction convection electrical filament illuminate incandescent neon radiation reflection refraction
Grade 6	*Design a technology solution to a problem* data evidence hypothesis materials predict procedure prove theory variable	*Continue design of technology solution* mass matter physical physics probability property range scientific method	*Continue design of technology solution* acceleration deceleration momentum projectile terminal velocity velocity work	*Complete design of technology solution* effort distance force kinetic energy potential energy thrust
Grade 7	*Relate simple machines to mechanics* fulcrum gravity inclined plane lever mechanics pulley simple machines slope	*What's happening: speed, direction and position* acceleration direction kinetic motion position potential terminal velocity thrust	*Read about friction* drag effort energy friction power resistance thermal work	*Estimate friction and it's effect on heat and motion* direction inertia position projectile speed velocity
Grade 8	*Explain how simple machines demonstrate mechanics.* fulcrum gravity inclined plane lever machine mechanical piston pulley slope wheel and axle	*Simple machines: how they get work done.* effort energy focus gravitational force horsepower inertia magnetism momentum pull push rotate thrust work	*Simple machines and energy.* acceleration action deceleration direction equilibrium kinetic momentum position potential power reaction speed terminal velocity universal gravitation	*Explan how one simple machine works.* drag efficiency friction resistance work