Academic Vocabulary

CONTENT BUILDER FOR THE PLC

SCIENCE
GRADE 6

PLEASE NOTE: The words contained in **Academic Vocabulary** are words/concepts/terms essential for concept development; this list is not intended to be comprehensive.
The "new to grade level" vocabulary suggestions are a starting point, and educators are encouraged to refer to their district curriculum resources for additional words/concepts/terms.

Elements and Compounds

6.5 **Matter and energy.** The student knows the differences between elements and compounds.

		important words for concept development	
subcluster	**standards**	**new to grade level**	**previously introduced**
Elements and Compounds	6.5(A), 6.5(B)	carbon chemical formula chemical symbol compound element pure substance subscript	atmosphere Earth materials
Chemical Change	6.5(C)	chemical change chemical property chemical reaction precipitate	evidence physical property state of matter

Physical Properties of Matter

6.6 **Matter and energy.** The student knows matter has physical properties that can be used for classification.

		important words for concept development			
subcluster	**standards**	**new to grade level**		**previously introduced**	
Properties of Matter	6.6(A), 6.6(C)	brittle conductivity* ductility element* hardness luster malleability*	metal metalloid mineral Moh's Scale of Hardness nonmetal* streak streak plate	color density dull electric current magnetism physical property* states of matter	
Density	6.6(B)	formula		balance* density* graduated cylinder* mass*	substance* triple beam balance volume* water displacement

Earth's Resources

6.7 **Matter and energy.** The student knows that some of Earth's energy resources are available on a nearly perpetual basis, while others can be renewed over a relatively short period of time. Some energy resources, once depleted, are essentially nonrenewable.

		important words for concept development	
subcluster	**standards**	**new to grade level**	**previously introduced**
Energy Resources	6.7(A)	biomass geothermal hydropower nuclear power solar power	biofuels conservation energy resource nonrenewable resources (coal, oil, natural gas) renewable resources water wind

Force, Motion, Potential, and Kinetic Energy

6.8 **Force, motion, and energy.** The student knows force and motion are related to potential and kinetic energy.

		important words for concept development		
subcluster	**standards**	**new to grade level**	**previously introduced**	
Potential and Kinetic Energy	6.8(A)	elastic potential energy energy transformation gravitational potential energy* kinetic energy* law of conservation of energy potential energy*		
Motion	6.8(B), 6.8(C), 6.8(D), 6.8(E)	average speed* balanced forces constant speed* distance inclined plane time* unbalanced forces	acceleration direction displacement force	motion* position speed* spring scale

Law of Conservation of Energy

6.9 **Force, motion, and energy.** The student knows that the Law of Conservation of Energy states that energy can neither be created nor destroyed, it just changes form.

		important words for concept development	
subcluster	**standards**	**new to grade level**	**previously introduced**
Energy Transfer	6.9(A), 6.9(B)	conduction convection energy transfer radiation thermal energy	temperature
Energy Transformation	6.9(C)	energy conversion energy transformation law of conservation of energy	chemical energy* convert* electrical energy* light energy* mechanical energy* thermal energy*

Structure of Earth

6.10 Earth and space. The student understands the structure of Earth, the rock cycle, and plate tectonics.

important words for concept development					
subcluster	**standards**	**new to grade level**		**previously introduced**	
Classifying Rocks	6.10(B)	igneous rock metamorphic rock rock cycle sedimentation		cementation compaction deposition erosion heat lava	magma pressure sediment sedimentary rock volcanic eruption weathering
Layers of Earth	6.10(A)	asthenosphere compositional layers continental crust crust inner core	lithosphere mantle mechanical layers oceanic crust outer core	Earth	
Tectonic Plates	6.10(C), 6.10(D)	African plate boundary continental crust convergent boundary divergent boundary Eurasian plate geological event Indo-Australian plate mid-ocean ridge North American plate	ocean basin oceanic crust Pacific plate plate plate tectonics sea floor spreading South American plate subduction transform boundary	earthquake geography mountain building volcano	

Organization of Solar System

6.11 **Earth and space.** The student understands the organization of our solar system and the relationships among the various bodies that comprise it.

		important words for concept development		
subcluster	**standards**	**new to grade level**	**previously introduced**	
The Solar System	6.11(A), 6.11(B)	asteroid comet* elliptical orbit* gravitational attraction* meteor unbalanced forces*	composition force gravity orbit*	physical property revolution rotation solar system
Space Exploration	6.11(C)	capsule module payload rocket simulator space exploration	gravity	

Classifications of Organisms

6.12 **Organisms and environments.** The student knows all organisms are classified into domains and kingdoms. Organisms within these taxonomic groups share similar characteristics that allow them to interact with the living and nonliving parts of their ecosystem.

		important words for concept development		
subcluster	**standards**	**new to grade level**		**previously introduced**
Characteristics and Classification of Organisms	6.12(A), 6.12(B), 6.12(C), 6.12(D)	animalia* archaeabacteria asexual reproduction autotrophic* bacteria cell domain eubacteria* eukaryotic fungi* heterotrophic*	kingdom* multicellular* nucleus plantae* prokaryotic protista sexual reproduction* taxonomic classification taxonomy unicellular	
Interdependence	6.12(E), 6.12(F)	abiotic biotic community equilibrium population		ecosystem organism species