

Academic Vocabulary

CONTENT BUILDER FOR THE PLC

SCIENCE
GRADE 4

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.

Physical Properties of Matter

4.5 Matter and energy. The student knows that matter has measurable physical properties and those properties determine how matter is classified, changed, and used.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Properties of Matter	4.5(A)	buoyancy mass* volume*	magnetism* matter* physical property* states of matter* temperature*
Mixtures	4.5(B)	dissolve* solution*	mix mixture* physical property* separate

Force, Motion, and Energy

4.6 Force, motion, and energy. The student knows that energy exists in many forms and can be observed in cycles, patterns, and systems.

important words for concept development				
subcluster	standards	new to grade level		previously introduced
Forms of Energy	4.6(A)	electrical energy*		energy* light energy* mechanical energy* sound energy* thermal energy*
Electricity	4.6(B), 4.6(C)	battery closed circuit* conductor* electrical circuit* electricity*	insulator* open circuit* path switch	electrical current* electrical energy* energy* thermal energy*
Force	4.6(D)	friction		descriptive investigation force* gravity magnetism motion*/movement position pull push

Natural Resources and Changes to Earth’s Surface

4.7 Earth and space. The student knows that Earth consists of useful resources and its surface is constantly changing.

important words for concept development				
subcluster	standards	new to grade level		previously introduced
Properties of Soil	4.7(A)	clay* humus loam* silt* topsoil		components of soil (rocks, air, water) decompose gravel nutrient particle properties of soil (color, texture*, ability to retain water*, supports growth, particle size) retain texture
Renewable and Nonrenewable Resources	4.7(C)	coal natural gas* nonrenewable resources*	petroleum/oil* renewable resources* (air, water, plants, animals)	conservation recycle
Changes to Earth’s Surface	4.7(B)	delta deposition* erosion* glacier	landform sediment* slow change	soil* weathering*

Earth's Cycles and Patterns

4.8 Earth and space. The student knows that there are recognizable patterns in the natural world and among the Sun, Earth, and Moon system.

important words for concept development				
subcluster	standards	new to grade level		previously introduced
Weather	4.8(A)	anemometer forecast	Celsius thermometer* (degrees Celsius) cloud cover* meteorologist precipitation* rain gauge temperature*	weather weather map wind direction wind speed* wind vane windsock
Water Cycle	4.8(B)	cycle accumulation* runoff* solar energy water cycle*	condensation* evaporation* precipitation* Sun	
Patterns	4.8(C)	cycle lunar cycle sequence	appearance full moon Moon new moon pattern	revolve rotate seasons shadow

Interactions of Organisms in Ecosystems

4.9 Organisms and environments. The student knows and understands that living organisms within an ecosystem interact with one another and with their environment.

important words for concept development					
subcluster	standards	new to grade level		previously introduced	
Food Webs	4.9(A), 4.9(B)	carbon dioxide	omnivore	community	habitat
		carnivore	photosynthesis	consumer	organism
		flow of energy	predator	decomposer	population
		food web	prey	ecosystem	producer
		herbivore		energy	Sun

Adaptations and Behaviors

4.10 Organisms and environments. The student knows that organisms undergo similar life processes and have structures and behaviors that help them survive within their environments.

important words for concept development				
subcluster	standards	new to grade level		previously introduced
Adaptations	4.10(A)	adaptation camouflage defense mimicry	predator prey protection	environment function organism structure survive
Inherited Traits and Learned Behaviors	4.10(B)	heredity learned behavior*		behavior inherited trait* offspring* parent
Life Cycles	4.10(C)	germinate radish		adult egg insect life cycle larva life cycle metamorphosis nymph plant life cycle pupa seedling