

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.

Properties of Matter

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

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Physical Properties	4.6(A)	buoyancy particle physical state relative density substance	magnetism mass matter physical property states of matter temperature
Mixtures	4.6(B), 4.6(C)	classified component conserved dissolve solution substance	liquid mass matter mixture physical property solid states of matter

Force and Motion

4.7 Force, motion, and energy. The student knows the nature of forces and the patterns of their interactions.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Investigating Force	4.7(A)	contact distance	force friction gravity magnetism motion/movement position

Energy

4.8 Force, motion, and energy. The student knows that energy is everywhere and can be observed in cycles, patterns, and systems.

important words for concept development				
subcluster	standards	new to grade level		previously introduced
Transfer of Energy	4.8(A)	particle sound waves transfer		energy motion vibration
Electrical Energy	4.8(B), 4.8(C)	battery circuit* closed circuit conductor electrical circuit electrical current electrical energy electricity electron	energy source flow flow of energy insulator open circuit path substance switch	energy light energy thermal energy

Space

4.9 Earth and space. The student recognizes patterns among the Sun, Earth, and Moon system and their effects.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Seasons	4.9(A)	cycle sequence	appearance pattern seasons temperature
Appearance of the Moon	4.9(B)	cycle lunar* revolve sequence	appearance Earth Moon* orbit pattern

Earth's Processes

4.10 Earth and space. The student knows that there are processes on Earth that create patterns of change.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Water Cycle	4.10(A)	accumulation*/collection condensation* cycle evaporation* runoff* solar energy water cycle*	atmosphere energy precipitation* (rain, hail, snow, sleet) thermal energy Sun
Earth's Changing Surface	4.10(B)	delta glacier sand dune sediment slow change	deposition erosion landform soil weathering
Weather and Climate	4.10(C)	climate*	atmosphere precipitation temperature weather*

Earth's Resources

4.11 Earth and space. The student understands how natural resources are important and can be managed.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Renewable and Nonrenewable Resources	4.11(A)	abundance deplete nonrenewable resource* (coal, petroleum/oil*, natural gas*) renewable resource* (air, plants, water, animals) replenish	conservation natural resource recycle
Resource Management	4.11(B)	disposal energy resource	conservation natural resource recycling
Properties of Rocks	4.11(C)	density permeability porosity water content	gravity physical property

Organisms and Environments

4.12 Organisms and environments. The student describes patterns, cycles, systems, and relationships within environments.

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Food Webs	4.12(A), 4.12(B)	carbon dioxide carnivore food web herbivore omnivore photosynthesis predator prey	consumer decomposer ecosystem energy organism producer Sun
Fossil Evidence of Past Environments	4.12(C)	abiotic biotic fossil* model	environment imprint paleontologist

Structure, Function, and Traits

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

important words for concept development			
subcluster	standards	new to grade level	previously introduced
Plant Structure and Function	4.13(A)	adaptation	defense drought environment function organism protection structure survive
Physical Traits	4.13(B)	acquired physical trait inherited trait interaction	behavior environment organism parent