

VOCABULARY FOR THE NEW YORK STATE LIVING ENVIRONMENT CORE CURRICULUM GUIDE

*Correlated by Standard, Key Idea, Performance Indicator, and Major Understanding
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updated with lab terms and several terms to be included in a new edition to be released
at some point*

Note on Part D Vocabulary:

According to various people involved in Regents Exam development at SED, we can use the words specific to a required lab in Part D only in an item based on that particular lab, and this would only be acceptable to the extent that it was explained in the lab. A word from one lab can not be used in items based on any of the other required labs. In other words, we cannot just take a vocabulary word in a lab and assume full knowledge of it in the way it is understood now, or was required in the old syllabus. The words have a context and that must be considered too.

For example, a word such as mRNA can be used when asking about the Biodiversity lab. A student could be asked, given a particular DNA sequence and a mRNA codon table, to deduce the mRNA that would be formed, but a question about its movement from the nucleus to the ribosomes would not be OK unless that was specifically mentioned in the lab.

A word that does not appear in the core, but is used in one of the required labs can't show up on Parts A, B, or C of the same exam even though the lab is required during that academic year.

Using the same example, since in the Biodiversity Lab the word "translates" is used in explaining the connection between the mRNA and the protein, it would be acceptable to see the word "translates" or "translation" in a question that specifically tests the Biodiversity lab, but a question on part A or B to the tune of "Identify the molecule that is made when the sequence of molecular bases originally in DNA is translated." would not be acceptable.

STANDARD 1

Standard I Introduction

- Science
- Infer
- Experiment
- Peer review
- Societal
- Ethical

Key Idea 1 introduction

- Scientific inquiry

Performance indicator 1.1

- Phenomena
- Formulations

1.1b

- Concepts
- Society

1.1c

- Values

Performance indicator 1.3

- 1.3a
- Prediction

Performance indicator 1.4

- Theory
- Discipline

Key Idea 2 introduction

- Reasoning
- Consensus

Performance indicator 2.2

- Electronic
- Methodologies
- Technologies

Performance indicator 2.3

- Proposal
- Hypotheses
- 2.3c
- Bias

Sample size

Key Ideas 3 introduction

- Conventional
- Invented

Performance indicator 3.1

- Generalizations
- Diagrams
- Charts
- Equations
- Matrix

Performance indicator 3.2

- Statistical analysis
- Chance

Performance indicator 3.3

- Conclusion
- Prediction

STANDARD 4

Key Idea 1 introduction

- Organism
- Cellular
- Metabolic
- Stability
- Homeostasis
- Hereditary
- Reproduction
- Cells
- Chemical composition
- Organ systems
- Genetic
- Food web
- Components
- Ecosystem
- Balance
- Regulatory
- Level of organization
- Diversity
- Multicellular

Performance Indicator 1.1

- Populations
- Stability

1.1a

- Producer

- Consumer
- Decomposer
- Autotrophic
- Heterotrophic
- 1.1b
- Species
- Environments
- 1.1c
- Resources
- Interactions
- Total ecosystem
- 1.1d
- Interdependence
- Established ecosystem
- Environmental factors
- 1.1e
- Cyclic changes
- Equilibrium
- 1.1f
- Ecosystem stability

Performance Indicator 1.2

- Structures
- Functions
- Organizational levels
- Systems
- Tissues
- Organelles

1.2a

- Organ

1.2b

- Digestion
- Respiration
- Reproduction
- Circulation
- Excretion
- movement
- Coordination
- Immunity
- Life functions

1.2c

- Balanced internal environment
- Control mechanisms
- Deviations
- Corrective actions

1.2d

- Imbalance

1.2g

- Membrane
- Molecules
- Chemical signals
- Diffusion
- Active transport

1.2h

- Organic
- Inorganic

Living Environment Vocabulary sorted by topic

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1.2h cont.	Biotechnological methods	Bacteria
Chemical reaction	Manipulation of genes	2.2d
Protein	Combinations of traits	Inserting DNA segment
Starch	Varieties	Deleting DNA segment
Digested		Substituting DNA segment
Amino acids	Performance indicator 2.1	
Simple sugars	Replication	<i>Key Idea 3 Introduction</i>
Building blocks	Genetic material	Evolution
Synthesis	2.1a	Unifying theme
Compounds	Expression	Sex cells
1.2i	Inherited	Evolutionary change
Specialized	2.1b	Behavior
Molecules	Coded instructions	Change during lifetime
Transport	Generation	Natural selection
Cytoplasm	Heredity	Overproduction of offspring
Nutrient	2.1c	Variations among offspring
Mitochondria	Allele	Struggle for survival
Protein building	Chromosomes	Adaptive value
Ribosome	Trait	Survival
Cell membrane	2.1d	Adapted
Vacuole	Asexually reproducing	Environment
Nucleus	Genetically identical	Selection
1.2j	2.1e	Diversity
Receptor	Sexually reproducing	Geological time
Interactions	Individual	Reproductive cycle
Cellular communication	Genetic information	Pathogen
Endocrine	Egg	Antibiotic
Hormone	Sperm	Insect
Nerve cell	2.1f	Pesticide
	Base (DNA)	
Performance Indicator 1.3	A, G, C, T (not what they mean)	Performance Indicator 3.1
One-celled organism	Encoded	Mechanism of evolution
Complex organism	Molecular bases (DNA)	Pattern of evolution
1.3a	Template	3.1a
Multicellular	2.1h	Biological evolution
<i>Key Idea 2 introduction</i>	Altered gene	3.1b
Inherit	2.1i	Inheritable characteristic
Genetic information	Chains	Combination of genes
Continuity	Shape of protein	Reproductive cell
Parent	Function of protein	3.1c
Offspring	2.1k	Sorting of genes
Kingdoms	Body cells	Recombination of genes
Gene		Meiosis
Characteristic	Performance Indicator 2.2	Fertilization
Reproduction	Genetic makeup	3.1d
Physical traits	2.2a	Gene mutation
Molecular basis of heredity	Genetic manipulation	Radiation
Recombination	Selective Breeding	Body cells
Mutation	2.2b	3.1e
Genetic engineering	Genetic engineering	Fossil record
DNA	2.2c	3.1f
Replicate	Enzyme	Genetic variability
Selective breeding	Segment of DNA	3.1i
		Reproductive success

Living Environment Vocabulary sorted by topic

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3.11
 Extinction
 Adaptive characteristics

Key Idea 4 Introduction

Continuity
 Development
 Genetically identical
 Gamete
 Fertilization
 Zygote
 Growth
 Mitosis
 Differentiation
 Environmental impact
 Birth
 Aging
 Reproductive technology

Performance Indicator 4.1

4.1a
 Continuation
 4.1b
 Cloning
 4.1e
 Testosterone
 Estrogen
 Progesterone
 4.1f
 Mammal
 Ovary
 Internal fertilization
 Internal development
 Embryo
 Fetus
 Uterus
 Placenta
 Milk
 4.1g
 Testes
 4.1h
 Embryonic development
 Pregnancy
 Toxin
 Infections

Key Idea 5 Introduction

Dynamic equilibrium
 Energy
 Enzyme-controlled
 Biochemical processes
 External environment
 Internal environment
 Monitor

Respond
 Learned behavior
 Homeostasis
 Dynamic equilibrium
 Steady state
 Homeostatic feedback
 mechanism
 Deviations
 Normal state
 Corrective actions
 Disease
 Death

Performance Indicator 5.1

5.1a
 Photosynthesis
 5.1b
 Chloroplasts
 Chlorophyll
 Solar energy
 Carbon dioxide
 Water
 Energy-rich
 Glucose
 Oxygen
 5.1c
 Organic compounds
 Fat
 Bonds
 Chemical energy
 5.1d
 Cellular respiration
 ATP
 Mitochondria
 5.1e
 Transform
 Eliminate waste
 5.1f
 Biochemical processes
 Breakdown
 Biological catalysts
 Chemical change
 pH
 Temperature
 5.1g
 Antibody

Performance Indicator 5.2

5.2b
 Virus
 Fungi
 Parasite
 5.2c
 Immune system

Antigens
 Pathogenic
 Cancer
 5.2d
 White blood cells
 Engulf
 5.2e
 Vaccinations
 Microbes
 5.2f
 Viral disease
 AIDS
 Infectious agent
 Cancerous cell
 5.2g
 Allergic reactions
 Transplanted
 5.2h
 Inheritance
 Toxic
 Nutrition
 Organ malfunction
 Personal behavior
 5.2i
 Gene mutations
 5.2j
 Diagnosing

Performance Indicator 5.3

5.3a
 Response to stimuli
 Cellular
 Organismal
 5.3b
 Feedback mechanism
 Heart rate
 Respiratory rate
 Insulin
 Pancreas
 Guard cells
 Rate of water loss

Key Idea 6 Introduction

Ecology
 Flow of energy
 Cycling of materials
 Competition
 Ecological niche
 Abiotic
 Biotic
 Mate
 Food chain
 Food web

Living Environment Vocabulary sorted by topic

Performance Indicator 6.1

- 6.1a
 - Algae
 - Herbivores
 - Carnivore
 - Decomposers
 - Photosynthetic organism
 - Green plant
- 6.1b
 - Atom
 - Biosphere
 - Energy pyramid
- 6.1c
 - Carbon
 - Hydrogen
 - Nitrogen
- 6.1d
 - Habitat
 - Carrying capacity
 - Minerals
 - Recycle
- 6.1 e
 - Physical conditions
 - Light intensity
 - Temperature range
 - Mineral availability
 - Soil
 - Rock
- 6.1g
 - Producer
 - Consumer
 - Predator
 - Prey
 - Parasite

Host

- Scavenge
- Performance Indicator 6.2
- 6.2a
 - Role
 - Environmental change
 - Biodiversity
 - Ecosystem stability
- Performance Indicator 6.3
- Disturbance
- 6.3a
 - Interrelationship
 - Interdependency
 - 6.3b
 - Ecological succession
 - Ecological community
 - 6.3c
 - Climatic change
 - Natural disaster
 - Altered ecosystem
 - Long-term stability

Key Idea 7 Introduction

- Pollution**
- Deforestation**
- Global warming
- Ozone shield
- Technological fix
- Finite resources
- Global awareness
- Environmentally literate

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Performance Indicator 7.1

- 7.1a
 - Renew (resources)
 - 7.1b
 - Atmosphere
 - Water cycle
 - 7.1c
 - Population growth
 - Consumption
 - Technology
 - Direct harvesting
 - Global stability
- Performance Indicator 7.2
- Technological development
- 7.2a
 - Chemical composition
 - 7.2c
 - Industrialization
 - Fossil fuel
 - Nuclear fuel

Performance Indicator 7.3

- Individual choice
 - Societal actions
- 7.3a
 - Risks
 - Costs
 - Benefit
 - Trade-off
 - 7.3b
 - Generation

Terms to be added to new edition of the core:

Allele

Chlorophyll

Endocrine

Rate of water loss (I think if I remember right as applicable to guard cells)

APPENDIX A - ALPHABETICAL LABORATORY CHECKLIST

Assumptions	Data	Independent variable	Specimens
Chromatography	Data table	Length	Staining technique
Compound microscope	Dependent variable	Limitations	Stereoscope
Computer	Dichotomous key	Magnification	Temperature
Conclusion	Electronic balance	Mass	Thermometer
Control group	Electrophoresis	Metric	Triple-beam balance
Controlled experiment	Expressed data	Molecule	Volume
Controlled variables	Generalization	Observations	Wet-mount slide
	Graduated cylinder	Specimen	
	Graph		