VOCABULARY FOR THE
NEW YORK STATE
LIVING ENVIRONMENT CORE CURRICULUM GUIDE

Correlated by Standard, Key Idea, Performance Indicator, and Major Understanding
by Bill Siebert, Arlington High School, Lagrangeville NY
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 1 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

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

Performance Indicator 1.2
Structures
Functions
Organizational levels
Systems
Tissues
Organelles

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

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

1.2h cont.
- Chemical reaction
- Protein
- Starch
- Digested
- Amino acids
- Simple sugars
- Building blocks
- Synthesis
- Compounds

1.2i
- Specialized
- Molecules
- Transport
- Cytoplasm
- Nutrient
- Mitochondria
- Protein building
- Ribosome
- Cell membrane
- Vacuole
- Nucleus

1.2j
- Receptor
- Interactions
- Cellular communication
- Endocrine
- Hormone
- Nerve cell

Performance Indicator 1.3
- One-celled organism
- Complex organism

1.3a
- Multicellular

Key Idea 2 introduction
- Inherit
- Genetic information
- Continuity
- Parent
- Offspring
- Kingdoms
- Gene
- Characteristic
- Reproduction
- Physical traits
- Molecular basis of heredity
- Recombination
- Mutation
- Genetic engineering
- DNA
- Replicate
- Selective breeding

2.1a
- Inherited

2.1b
- Coded instructions
- Generation
- Heredity

2.1c
- Allele
- Chromosomes
- Trait

2.1d
- Asexually reproducing
- Genetically identical

2.1e
- Sexually reproducing
- Individual
- Genetic information
- Egg
- Sperm

2.1f
- Base (DNA)
  - A, G, C, T (not what they mean)
  - Encoded

2.1h
- Altered gene

2.1i
- Chains
- Shape of protein
- Function of protein

2.1k
- Body cells

Key Idea 3 introduction
- Evolution
- Unifying theme
- Sex cells
- Evolutionary change
- Behavior
- Change during lifetime
- Natural selection
- Overproduction of offspring
- Variations among offspring
- Struggle for survival
- Adaptive value
- Survival
- Adapted
- Environment
- Selection
- Diversity
- Geological time
- Reproductive cycle
- Pathogen
- Antibiotic
- Insect
- Pesticide

Performance Indicator 3.1
- Mechanism of evolution
- Pattern of evolution

3.1a
- Biological evolution

3.1b
- Inheritable evolution
- Combination of genes
- Reproductive cell

3.1c
- Sorting of genes
- Recombination of genes
- Meiosis
- Fertilization

3.1d
- Gene mutation
- Radiation
- Body cells

3.1e
- Fossil record

3.1f
- Genetic variability

3.1i
- Reproductive success
Living Environment Vocabulary sorted by topic

3.1
- 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
- 4.1c Testosterone
- 4.1d Estrogen
- 4.1e 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

Performance Indicator 5.1
- 5.1a Photosynthesis
- 5.1b Chloroplasts
- 5.1c Chlorophyll
- 5.1d Solar energy
- 5.1e Carbon dioxide
- 5.1f Water
- 5.1g Energy-rich
- 5.1h Glucose
- 5.1i Oxygen

5.1j
- Organic compounds
- Fat
- Bonds
- Chemical energy

5.1k
- Cellular respiration
- ATP
- Mitochondria

5.1l
- Transform
- Eliminate waste

5.1m
- Biochemical processes
- Breakdown
- Biological catalysts
- Chemical change
- pH
- Temperature

5.1n
- Antibody

Performance Indicator 5.2
- 5.2a Virus
- 5.2b Fungi
- 5.2c Parasite

5.2d
- Immune system

5.2e
- Antigens
- Pathogenic
- Cancer

5.2f
- White blood cells
- Engulf

5.2g
- Vaccinations
- Microbes

5.2h
- Viral disease
- AIDS
- Infectious agent
- Cancerous cell

5.2i
- Allergic reactions
- Transplanted

5.2j
- Inheritance
- Toxic
- Nutrition
- Organ malfunction
- Personal behavior

**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

<table>
<thead>
<tr>
<th>Performance Indicator 6.1</th>
<th>Host</th>
<th>Scavenge</th>
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<tbody>
<tr>
<td><strong>6.1a</strong></td>
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<tr>
<td>Algae</td>
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<td>Herbivores</td>
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<td>Carnivore</td>
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<td>Decomposers</td>
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<td>Photosynthetic organism</td>
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<td>Green plant</td>
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<tr>
<td><strong>6.1b</strong></td>
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<tr>
<td>Atom</td>
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<td>Biosphere</td>
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<td>Energy pyramid</td>
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<tr>
<td><strong>6.1c</strong></td>
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<tr>
<td>Carbon</td>
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<tr>
<td>Hydrogen</td>
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<tr>
<td>Nitrogen</td>
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<td><strong>6.1d</strong></td>
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<tr>
<td>Habitat</td>
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<td>Carrying capacity</td>
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<td>Minerals</td>
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<td>Recycle</td>
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<td><strong>6.1e</strong></td>
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<td>Temperature range</td>
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<td>Mineral availability</td>
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<td>Soil</td>
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<tr>
<td>Rock</td>
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<tr>
<td><strong>6.1g</strong></td>
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<tr>
<td>Producer</td>
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<tr>
<td>Prey</td>
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<td>Parasite</td>
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<table>
<thead>
<tr>
<th>Performance Indicator 6.2</th>
<th>Role</th>
<th>Environmental change</th>
<th>Biodiversity</th>
<th>Ecosystem stability</th>
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<tbody>
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<td><strong>6.2a</strong></td>
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<th>Performance Indicator 6.3</th>
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<td><strong>6.3a</strong></td>
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<td>Interrelationship</td>
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<td>Interdependency</td>
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<td><strong>6.3b</strong></td>
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<tr>
<td>Ecological succession</td>
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<td>Ecological community</td>
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<tr>
<td><strong>6.3c</strong></td>
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<tr>
<td>Climatic change</td>
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<tr>
<td>Natural disaster</td>
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<tr>
<td>Altered ecosystem</td>
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<tr>
<td>Long-term stability</td>
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</tbody>
</table>

#### Key Idea 7 Introduction

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

<table>
<thead>
<tr>
<th>Performance Indicator 7.1</th>
<th>Renew (resources)</th>
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<tbody>
<tr>
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<td>Atmosphere</td>
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<td>Water cycle</td>
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<td><strong>7.1b</strong></td>
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<tr>
<td>Population growth</td>
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<tr>
<td>Consumption</td>
<td></td>
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<tr>
<td>Technology</td>
<td></td>
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<tr>
<td>Direct harvesting</td>
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<tr>
<td>Global stability</td>
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<table>
<thead>
<tr>
<th>Performance Indicator 7.2</th>
<th>Technological development</th>
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<tr>
<td><strong>7.2a</strong></td>
<td></td>
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<tr>
<td>Chemical composition</td>
<td></td>
</tr>
<tr>
<td><strong>7.2c</strong></td>
<td></td>
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<tr>
<td>Industrialization</td>
<td></td>
</tr>
<tr>
<td>Fossil fuel</td>
<td></td>
</tr>
<tr>
<td>Nuclear fuel</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Indicator 7.3</th>
<th>Individual choice</th>
<th>Societal actions</th>
</tr>
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<tbody>
<tr>
<td><strong>7.3a</strong></td>
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<tr>
<td>Risks</td>
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<tr>
<td>Costs</td>
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<tr>
<td>Benefit</td>
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<tr>
<td>Trade-off</td>
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<tr>
<td><strong>7.3b</strong></td>
<td></td>
<td></td>
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<tr>
<td>Generation</td>
<td></td>
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</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Assumptions</th>
<th>Data</th>
<th>Independent variable</th>
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</thead>
<tbody>
<tr>
<td>Chromatography</td>
<td>Data table</td>
<td>Length</td>
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<tr>
<td>Compound</td>
<td>Dependent variable</td>
<td>Limitations</td>
</tr>
<tr>
<td>microscope</td>
<td>Dichotomous key</td>
<td>Magnification</td>
</tr>
<tr>
<td>Computer</td>
<td>Electronic balance</td>
<td>Mass</td>
</tr>
<tr>
<td>Conclusion</td>
<td>Electrophoresis</td>
<td>Metric</td>
</tr>
<tr>
<td>Control group</td>
<td>Expressed data</td>
<td>Observations</td>
</tr>
<tr>
<td>Controlled experiment</td>
<td>Generalization</td>
<td>Specimens</td>
</tr>
<tr>
<td>Controlled variables</td>
<td>Graduated cylinder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Graph</td>
<td></td>
</tr>
</tbody>
</table>

Specimens  
Staining technique  
Stereoscope  
Temperature  
Thermometer  
Triple-beam balance  
Volume  
Wet-mount slide