

# NYS LIVING ENVIRONMENT REGENTS EXAM KEY WORDS

## SCIENTIFIC METHOD AND EXPERIMENTAL DESIGN

- Experiment
- Procedure
- Conclusion
- Results
- Sample Size
- Hypothesis
- Data
- Axis
- Scale
- Independent Variable
- Dependent Variable
- Control
- Constant

- Microscope
- Fine Adjustment
- Coarse Adjustment
- Slide
- Coverslip
- Pipette
- Total Magnification
- Measurement

## THE CELL, ORGANELLES AND CELL MEMBRANE

- Life Functions
- Homeostasis/ Dynamic Equilibrium
- Organelles
- Transport
  - Cell Membrane
  - Cell Wall

- Osmosis
- Diffusion
- Active Transport
- Passive Transport
- Semipermeable
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- Synthesis
  - Ribosome
- Regulation
  - Nucleus
- Respiration
  - Mitochondria

### BIOCHEMISTRY, PHOTOSYNTHESIS AND RESPIRATION:

- Enzyme, Organic Catalyst
- Substrate

- “Lock and Key” Model
- Factors (3) that affect enzyme action:
- Indicators
- Building blocks
- Organic
- Starch
- Glucose
- Protein
- Peptide
- Amino Acid
- Nucleic Acid
- Nucleotide (define and draw)
- Lipid
- Photosynthesis (Define and write out equation)

- Chlorophyll
- Chloroplast
- Stomate
- Guard Cell
- Respiration (Define and write equation)
- Chemical Bond Energy
- ATP
- Aerobic (Define and provide an example of an organism)
- Anaerobic (Define and provide an example of an organism)
- Lactic Acid
- Process

### BODY SYSTEMS:

- Tissue
- Organ
- Organ System

- Organism
- Antibody
- Antigen
- Antibiotic
- Virus
- Microbe
- AIDS
- Disease
- Vaccine
- Transplant
- White Blood Cell
- Phagocytosis, Engulf
- Red Blood Cell
- Platelets

- Hormones
- Glands
- Insulin
- Pancreas
- Pathogen
- Neuron
- Neurotransmitter
- Receptor
- Feedback Mechanism (Define and provide an example)
- Gas Exchange (Define and provide a site and identify which gases are exchanged)
- Capillary
- Alveoli
- Small Intestine

### REPRODUCTION: ASEXUAL, SEXUAL AND HUMAN

- Asexual (Define and example)

- Sexual (Define and example)
- Diploid (Define and abbreviation)
- Haploid/Monoploid (Define and abbreviation)
- Mitosis
- Meiosis
- Gamete
- Egg
- Sperm
- Zygote
- Fetus
- Placenta
- Uterus
- Ovary
- Oviduct/Fallopian



- Testes
- Umbilical Chord
- Estrogen
- Progesterone
- Testosterone
- Implantation
- Ovulation
- Cancer
- Differentiation
- Hereditary Information
- Variation
- Fertilization/Recombination
- Cleavage
- Nondisjunction

- Down Syndrome
- Amniocentesis
- Karyotype

### MODERN GENETICS:

- DNA
- Gene
- Chromosome
- Molecular bases (List all 5 and identify which is different than the others)
- RNA
- Gene expression
- Deletion
- Substitution
- Insertion
- Sickle Cell Anemia
- Cystic Fibrosis

- Template
- Replication
- Alter
- Transcription
- Translation
- Codon
- Ribosome
- mRNA
- tRNA
- Amino Acid

### BIOTECHNOLOGY:

- Gene splicing
- Restriction enzymes
- Gel electrophoresis
- Selective breeding

- Genetic engineering
- Recombinant DNA
- Somatic Cell
- Plasmid
- Cloning

### EVOLUTION:

- Natural selection
- Competition
- Overproduction
- Limited Resources
- Inheritance
- Survival of the Fittest
- Advantageous
- Mutation
- Variation (Define and two sources)

- Adapt/adaptation
- Common ancestor/ancestry
- Structural similarities
- Extinction
- Frequency
- Bacterial resistance
- Dichotomous Key
- Scientific Name

### ECOLOGY:

- Biodiversity
- Habitat
- Niche
- Equilibrium
- Carrying capacity
- Limiting Factors

- Competition
- Autotroph(ic)
- Heterotroph(ic)
- Herbivore
- Producer
- Decomposer
- Parasite
- Predator
- Prey
- Succession
- Abiotic
- Biotic
- Material cycles
- Species

- Population
- Community
- Ecosystem
- Food Chain
- Food Web

### HUMAN IMPACT:

- Global warming
- Greenhouse gases
- Direct harvesting
- Native species
- Invasive species
- Finite
- Decline
- Renewable
- Trade-off

- Deforestation
- Habitat destruction
- Endangered species
- Offshore drilling
- Biological control
- Acid Rain
- pH
- Biological Magnification
- Ozone Depletion