

Waverly Science Sequence

K-4: Grade Level Standards aligned with 5th grade Science MEAP

5-7: Grade Level Standards aligned with 8th grade Science MEAP

8th Grade: September to November: Space Science and MEAP Review
November to June: High School Science Content Standards Pre-requisites

April: Science Literacy Placement Test for entrance into Introductory Biology **OR** College Prep Biology

Starting with the Class of 2011: All students must have three credits (years) of science in the following categories: One credit (year) of BIOLOGY; One credit (year) of CHEMISTRY or PHYSICS; One credit (year) of one additional SCIENCE

9th Grade: (Science Literacy Placement Test and Teacher Recommendation decides which Biology)

- Introductory Biology (Meets Biology Requirement for Graduation)

Glencoe Biology: The Dynamics of Life (2004)

Unit 1: What is biology?

Chapter 1 - Biology: The Study of Life

Unit 2: Ecology

Chapter 2 - Principles of Ecology

Chapter 3 - Communities and Biomes

Chapter 4 - Population Biology

Chapter 5 - Biological Diversity and Conservation

Unit 3: The Life of a Cell

Chapter 6 - The Chemistry of Life

Chapter 7 - A View of a Cell

Chapter 8 - Cellular Transport and the Cell Cycle

Chapter 9 - Energy in a Cell

Unit 4: Genetics

Chapter 10 - Mendel and Meiosis

Chapter 11 - DNA and Genes

Chapter 12 - Patterns of Heredity and Human Genetics

Chapter 13 - Genetic Technology

Unit 5: Change Through Time

Chapter 14 - The History of Life

Chapter 15 - The Theory of Evolution

Chapter 16 - Primate Evolution

Chapter 17 - Organizing Life's Diversity

High School Science
Content Standards –
Core and Essential
Objectives

- College Prep Biology (Meets Biology Requirement for Graduation)

Glencoe Biology: The Dynamics of Life (2004)

Unit 1: What is biology?

Chapter 1 - Biology: The Study of Life

Unit 2: Ecology

Chapter 2 - Principles of Ecology

Chapter 3 - Communities and Biomes

Chapter 4 - Population Biology

Chapter 5 - Biological Diversity and Conservation

Unit 3: The Life of a Cell

Chapter 6 - The Chemistry of Life

Chapter 7 - A View of a Cell

Chapter 8 - Cellular Transport and the Cell Cycle

Chapter 9 - Energy in a Cell

Unit 4: Genetics

Chapter 10 - Mendel and Meiosis

Chapter 11 - DNA and Genes

Chapter 12 - Patterns of Heredity and Human Genetics

Chapter 13 - Genetic Technology

Unit 5: Change Through Time

Chapter 14 - The History of Life

Chapter 15 - The Theory of Evolution

Chapter 16 - Primate Evolution

Chapter 17 - Organizing Life's Diversity

Unit 6: Viruses, Bacteria, Protists, and Fungi

Chapter 18 - Viruses and Bacteria

Chapter 19 - Protists

Chapter 20 - Fungi

Unit 7: Plants

Chapter 21 - What is a plant?

Chapter 22 - The Diversity of Plants

Chapter 23 - Plant Structure and Function

Chapter 24 - Reproduction in Plants

Unit 8: Invertebrates

Chapter 25 - What is an animal?

Chapter 26 - Sponges, Cnidarians, Flatworms, and Roundworms

Chapter 27 - Mollusks and Segmented Worms

Chapter 28 - Arthropods

Chapter 29 - Echinoderms and Invertebrate Chordates

Unit 9: Vertebrates

Chapter 30 - Fishes and Amphibians

Chapter 31 - Reptiles and Birds

Chapter 32 - Mammals

Chapter 33 - Animal Behavior

Unit 10: The Human Body

Chapter 34 - Protection, Support, and Locomotion

Chapter 35 - The Digestive and Endocrine Systems

Chapter 36 - The Nervous System

Chapter 37 - Respiration, Circulation, and Excretion

Chapter 38 - Reproduction and Development

Chapter 39 - Immunity from Disease

High School Science
Content Standards –
Core and Essential
Objectives
And Recommended
Objectives of College
Bound Students

10th Grade: (Choose at least one)

- Earth Science (Recommended for ACT and MME proficiency – Meets 1 Additional Science Requirement for graduation)
- Introductory Physics (Meets Physics/Chemistry Requirement for graduation)
- College Prep Chemistry (Meets Chemistry/Physics Requirement for graduation & Encouraged for College Bound Students)
- Environmental Science (Semester Long – Meets ½ Additional Science Requirement for graduation)
- Astronomy (Semester Long – Meets ½ Additional Science Requirement for graduation)

11th Grade: (Choose at least one)

- Earth Science (Recommended for ACT and MME proficiency – Meets 1 Additional Science Requirement for graduation)
- Introductory Physics (Meets Physics/Chemistry Requirement for graduation)
- College Prep Chemistry (Meets Chemistry/Physics Requirement for graduation & Encouraged for College Bound Students)
- College Prep Physics (Meets Physics/Chemistry Requirement for graduation & Encouraged for College Bound Students)
- Advanced Placement Biology (Recommended to be taken after College Prep Chemistry)
- Environmental Science (Semester Long – Meets ½ Additional Science Requirement for graduation)
- Astronomy (Semester Long – Meets ½ Additional Science Requirement for graduation)

12th Grade: (Choose at least one)

- Earth Science (Recommended for ACT and MME proficiency – Meets 1 Additional Science Requirement for graduation)
- Introductory Physics (Meets Physics/Chemistry Requirement for graduation)
- College Prep Chemistry (Meets Chemistry/Physics Requirement for graduation & Encouraged for College Bound Students)
- College Prep Physics (Meets Physics/Chemistry Requirement for graduation & Encouraged for College Bound Students)
- Advanced Placement Chemistry (Recommended to be taken after College Prep Physics)
- Advanced Placement Biology (Recommended to be taken after College Prep Chemistry)
- Environmental Science (Semester Long – Meets ½ Additional Science Requirement for graduation)
- Astronomy (Semester Long – Meets ½ Additional Science Requirement for graduation)