Eighth Grade Science Syllabus (2025–2026)

Aligned with TEKS | Based on TCMPC | Section-Based Structure

Unit 1: Diagnostic Assessment & Course Introduction

- Diagnostic Pre-Test (30 items)
- Overview of Scientific Thinking and Lab Safety Expectations

Unit 2: Scientific and Engineering Practices

Scientific Investigations

TEKS: 8.1.A, 8.1.B, 8.1.H, 8.2.D, 8.4.B

• Laboratory Procedures & Safety

TEKS: 8.1.C

Laboratory Tools

TEKS: 8.1.D

• Collecting & Interpreting Data

TEKS: 8.1.E, 8.1.F, 8.2.B, 8.2.C, 8.2.D, 8.3.A

• Scientific Models

TEKS: 8.1.G, 8.2.A, 8.2.C

History & Nature of Science

TEKS: 8.4.A

Unit 3: Matter and Energy

• Elements, Compounds, and Mixtures

TEKS: 8.6.A, 8.6.B

• Cohesion, Adhesion, and Surface Tension

TEKS: 8.6.C

Acids & Bases

TEKS: 8.6.D

• Conservation of Mass in Chemical Reactions

TEKS: 8.6.E

Unit 4: Force, Motion, and Energy

Newton's Second Law

TEKS: 8.7.A

Newton's Laws of Motion

TEKS: 8.7.A, 8.7.B

• Transverse Waves

TEKS: 8.8.A

Waves and Technology

TEKS: 8.8.B

Unit 5: Earth and Space

• Stars, Galaxies, and the Universe

TEKS: 8.9.A, 8.9.B, 8.9.C

• Effects of the Sun and Oceans on the Atmosphere

TEKS: 8.10.A, 8.10.B, 8.10.C

• Causes of Climate Change

TEKS: 8.11.A, 8.11.B

• The Carbon Cycle

TEKS: 8.11.C

Unit 6: Organisms and Environments

• Population Dynamics

TEKS: 8.12.A

• Ecological Succession

TEKS: 8.12.B

Biodiversity

TEKS: 8.12.C

• Animal and Plant Cell Structures

TEKS: 8.13.A

• Genes, Chromosomes, and DNA

TEKS: 8.13.B

• Adaptations Within Populations

TEKS: 8.13.C

Unit 7: Review & Post-Test

- Comprehensive Review Activities
- Post-Test Science
- Reflection and Goal Setting