7th Grade Science Syllabus

McGraw Hill Physics: 2025–2026

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Course Description: This course builds students' understanding of science through hands-on investigations, collaborative learning, and critical thinking. Using the McGraw Hill Texas Science Grade 7 curriculum and the 2025 Science TEKS, students will explore life, earth, and physical sciences through scientific and engineering practices.

Materials

- Composition notebook
- Writing instruments
- Calculator
- Lab Materials

Goals: By the end of this year, you will be able to:

- Apply **scientific and engineering practices** to real-world problems.
- Master grade-level content as outlined in the **2025 TEKS**.
- Build skills in **critical thinking, data analysis, modeling, and communication**.
- Make cross-disciplinary connections to math, engineering, and environmental literacy.

Grading

- Daily Grades (Daily Work / Homework / Participation) – **60%**
- Exam Grades (Tests / Projects / Quizzes) – **40%**

Daily Structure

1. Bell Ringer
2. Reading Material/Assessments/Assignments
3. Exit Ticket

Policies

- **Late Work**: 10 points deducted each day. Not accepted after 4 days.
- **Make-Up Work**: The student is responsible for coming in during Pirate Period to receive any missed work/instruction.
- **Extra Help:** Tutoring available by appointment after school or any day during Pirate Period.

Note: This syllabus and pacing guide are intended as a general plan for the course. Adjustments may be made throughout the year to accommodate student needs, school events, or unforeseen circumstances. Any changes will be communicated in a timely and professional manner.

Pacing Guide

Chapter & Topic	TEKS Covered	Days
Scientific and Engineering Practices	7.1A–7.1H, 7.2A–7.2D, 7.3A–7.3C, 7.4A–7.4C, 7.5A–7.5G	7
Ch. 1: Elements, Compounds, and Solutions	7.1A–7.1G, 7.2B–7.2D, 7.3A–7.3C, 7.4A–7.4C, 7.5A–7.5E, 7.6A–7.6E	18
Ch. 2: Relationship Between Force and Motion	7.1B–7.1G, 7.2B–7.2C, 7.3A–7.3B, 7.4A, 7.4C, 7.5A–7.5B, 7.5G, 7.7A–7.7D	19
Ch. 3: Thermal Energy in Systems	7.1A–7.1E, 7.2C–7.2D, 7.3A–7.3C, 7.4A, 7.5A–7.5B, 7.5D–7.5E, 7.5G, 7.8A–7.8C	12
Ch. 4: Our Solar System	7.1A–7.1G, 7.2A–7.2D, 7.3A–7.3C, 7.4A, 7.5A–7.5G, 7.9A–7.9C	16
Ch. 5: Plate Tectonics	7.1B–7.1H, 7.2A–7.2D, 7.3A–7.3C, 7.4A–7.4C, 7.5A–7.5G, 7.10A–7.10B	11
Ch. 6: Humans and the Hydrosphere	7.1A–7.1E, 7.1G, 7.2A–7.2D, 7.3A–7.3C, 7.4A, 7.5A–7.5E, 7.5G, 7.11A–7.11B	11
Ch. 7: Matter and Energy in Ecosystems	7.1A–7.1E, 7.1G, 7.2B–7.2C, 7.3A–7.3C, 7.4B, 7.5A–7.5B, 7.5D–7.5E, 7.5G, 7.12A–7.12B	11
Ch. 8: Organisms and Traits	7.1A–7.1G, 7.2A–7.2C, 7.3A–7.3C, 7.4A, 7.4C, 7.5A–7.5B, 7.5D, 7.5F–7.5G, 7.13B–7.13D	14
Ch. 9: Human Body Systems	7.1A–7.1G, 7.2A–7.2D, 7.3A–7.3C, 7.4B, 7.5A, 7.5C–7.5D, 7.5F–7.5G, 7.13A	15
Ch. 10: Classification of Organisms	7.1A–7.1G, 7.2A–7.2B, 7.2D, 7.3A–7.3C, 7.4A–7.4B, 7.5A, 7.5D, 7.14A–7.14B	14

Total Days of Instruction: 148 (plus review, testing, and project time)

Instructional Approach

- **5E Model**: Engage, Explore, Explain, Elaborate, Evaluate
- **Hands-On Labs**: At least one per major concept
- **Cross-Curricular Links**: Math, engineering, environmental literacy
- **Differentiated Instruction**: Tiered assignments, choice boards, and technology integration

Year at a Glance

Fall Semester:

- Scientific & Engineering Practices (7 days)
- Ch. 1: Elements, Compounds, and Solutions (18 days)
- Ch. 2: Relationship Between Force and Motion (19 days)
- Ch. 3: Thermal Energy in Systems (12 days)
- Ch. 4: Our Solar System (start before winter break)

Spring Semester:

- Finish Ch. 4: Our Solar System
- Ch. 5: Plate Tectonics (11 days)
- Ch. 6: Humans and the Hydrosphere (11 days)
- Ch. 7: Matter and Energy in Ecosystems (11 days)
- Ch. 8: Organisms and Traits (14 days)
- Ch. 9: Human Body Systems (15 days)
- Ch. 10: Classification of Organisms (14 days)
- STAAR Review and Final Projects