Oregon and National Science Content Standards: Grade 7

Curriculum Activities	Oregon Science Content Standards	National Science Content Standards
Week 4: Dr. Pepper and Mentos Demonstration, Magic Candle Demonstration	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 5: Introduction to Science Inquiry: Cars and Ramps	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data. 7.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 6: Writing Procedures	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 7: “Comeback Can” Races Week 8: More Group Investigations	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data. 7.3S.3 Evaluate the validity of scientific explanations and conclusions based on the amount and quality of the evidence cited.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 9: Managing Data and Bar Graphs Week 10: Managing Data and Line Graphs	7.3S.1 Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific

	7.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.	inquiry
Week 11: Investigative Questions Week 12: Brainstorming Topics and Generating Questions Week 13: Polishing Questions Weeks 17 & 18: Investigation Design	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data. 7.4D.1 Define a problem that addresses a need and identify constraints that may be related to possible solutions. 7.4D.2 Design, construct, and test a possible solution using appropriate tools and materials. Evaluate the proposed solutions to identify how design constraints are addressed.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 20: Preliminary Data Collection Week 21: Developing a Data Format and Display	7.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 22: Investigations Begin	7.3S.1 Based on observations and science principles, propose questions or hypotheses that can be examined through scientific investigation. Design and conduct a scientific investigation that uses appropriate tools and techniques to collect relevant data.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 24: Transforming Investigations into Displays Week 25: Work on Display Boards Weeks 27 & 28: Work Continues on Investigations and Displays	7.3S.2 Organize, display, and analyze relevant data, construct an evidence-based explanation of the results of an investigation, and communicate the conclusions including possible sources of error.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry
Week 26: Analyzing Results	7.3S.3 Evaluate the validity of scientific explanations and conclusions based on the amount and quality of the evidence cited.	NS.5-8.1 As a result of activities in grades 5-8, all students should develop: • Abilities necessary to do scientific inquiry • Understandings about scientific inquiry