

Our Physical Science Journey: Quarterly Schedule

Block 1: Foundations of Matter & Air

Week	Topic / Focus	Key Experiments / Labs
Week 1	Atoms and Measurement	Exp 1.1: Air has Mass
Week 2	Concentration	Exp 1.2: The Density of Liquids
Week 3	Humidity and Evaporation	Exp 2.1: Evaporation and Temperature
Week 4	Composition of Air	Exp 2.2: Oxygen and Fire
Week 5	Atmospheric Pressure	Exp 3.1: Air Pressure (The Crushing Can)
Week 6	Layers of the Atmosphere	Exp 3.2: An Ozone Hole Model
Week 7	Chemical Composition of Water	Exp 4.1: Electrolysis

Block 2: Water & Earth Science

Week	Topic / Focus	Key Experiments / Labs
Week 1	Water Polarity and Cohesion	Exp 4.4: Hard vs. Soft Water
Week 2	Hydrosphere and Distillation	Exp 5.1: Distillation
Week 3	Atmospheric Moisture	Exp 5.3: Cloud Formation
Week 4	Earth and Sound Waves	Exp 6.1: Sound Travel in Solids/Liquids
Week 5	Magnetism and Earth	Exp 6.2: Making an Electromagnet
Week 6	Weather Patterns	Exp 7.1: Long-term Weather Study
Week 7	Convection Currents	Exp 7.2: Convection in Liquids

Block 3: Weather & Basic Physics

Week	Topic / Focus	Key Experiments / Labs
Week 1	Weather Prediction	Exp 8.1: Predicting Weather
Week 2	Severe Weather	Exp 8.3: Hurricane Movement
Week 3	Velocity and Motion	Exp 9.1: Measuring Average Velocity
Week 4	Acceleration	Exp 9.3: Acceleration due to Gravity
Week 5	Newton's 1st & 2nd Laws	Exp 10.1: Newton's 1st Law (Inertia)
Week 6	Newton's 3rd Law & Friction	Exp 10.3: Newton's 3rd Law
Week 7	Centripetal Force	Exp 11.2: Circular Motion

Block 4: Advanced Physics & Astrophysics

Week	Topic / Focus	Key Experiments / Labs
Week 1	General Theory of Relativity	Exp 11.4: Modeling Space-Time Curvature
Week 2	Atoms and Electricity	Exp 12.2: Making and Using an Electroscope
Week 3	Magnetic Fields	Exp 12.4: Visualizing Magnetic Field Lines
Week 4	Waves and Sound	Exp 13.1: Wave Behavior
Week 5	Light and Reflection	Exp 15.1: Reflection and Refraction
Week 6	Astrophysics	Lab: Multi-Day Sunspot Tracking
Week 7	Course Review	Comprehensive Assessment