**6th Grade Advanced Science Parent Guide**

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| This course is designed to provide students with the skills necessary to apply science concepts to their everyday life. Students will ask questions, plan and conduct investigations, and explain phenomena using appropriate tools and models. Students will identify problems and design solutions using engineering design practices. Recurring themes and concepts will be explored to make connections between overarching concepts. This course is built on the following strands: scientific and engineering practices; matter and energy; force, motion, and energy; earth and space; and organisms and environment. In advanced science, students will engage in inquiry-based science including designing and conducting their own investigations and learning to use and develop critical thinking skills. Texas Essential Knowledge and Skills for Grade 6 Science [§112.26 Science, Grade 6, Adopted 2021](https://texreg.sos.state.tx.us/public/readtac%24ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=19&pt=2&ch=112&rl=26) |
| 1st 6 Weeks:Introduction to Science/Safety -Interactive Science NotebooksProperties and Changes in Matter:Comparing Solids, Liquids, and GasesPhysical Properties of MatterMetals, Nonmetals, and MetalloidsIdentifying Chemical Changes | 4th 6 Weeks:Managing Earth’s Resources:Air ResourcesWater ResourcesSoil ResourcesEnergy Resources |
| 2nd 6 Weeks:Exploring Forces:Types of ForcesMeasuring ForcesEnergy:Kinetic & Gravitational PotentialConservation of EnergyOther Types of Potential EnergyWaves and Energy Transfer | 5th 6 Weeks:Organisms and Ecosystems:Ecosystem OrganizationCompetition Among OrganismsInteractions in EcosystemsVariations in Populations  |
| 3rd 6 Weeks:Earth-Sun-Moon System:Earth’s Movement and SeasonsTidesEarth’s StructureEarth’s SpheresEarth’s LayersRock Cycle | 6th 6 Weeks:Introduction to Living Things:Cell TheoryCharacteristics of Living Things |

**Questions?** Please contact your course science teacher.