**K – 5 Scope and Sequence**

**Red – Inquiry**

**Purple – Unifying Themes**

**Blue – Physical Science**

**Green – Life Science**

**Orange – Earth and Space Science**

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| **Kindergarten** | **Grade One** | **Grade Two** | **Grade Three** | **Grade Four** | **Grade Five** |
| Cause and effectPatternsSystems and system models | Cause and effectPatterns Structure and function | Cause and effectEnergy and matter: flows, cycles, and conservationPatternsStability and change Structure and function | Cause and effect PatternsScale, proportion, and quantitySystems and system models | Energy and matterCause and effectPatternsSystems and system models | Cause and effectEnergy and matterPatternsScale, proportion, quantitySystems and system models |
| Analyze and interpret dataAsk questions and define problemsConstruct explanations and design solutionsDevelop and use modelsEngage in argument from evidenceObtain, evaluate, and communicate informationPlan and carry out investigations | Analyze and interpret dataAsk questions and define problemsConstruct explanations and design solutionsObtain, evaluate, and communicate informationPlan and carry out investigations | Analyze and interpret dataAsk questions and define problemsConstruct explanations and design solutionsDevelop and use models Engage in argument from evidence Plan and carry out investigationsObtain, evaluate, and communicate information | Analyze and interpret dataAsk questions and defining problemsConstruct explanations and design solutions Develop and use modelsEngage in argument from evidenceObtain, evaluate, and communicate informationPlan and carry out investigations | Analyze and interpret dataAsk questions and defining problemsConstruct explanations and design solutionsDevelop and use modelsEngage in argument from evidenceObtain, evaluate, and communicate information Plan and carry out investigations | Analyze and interpret dataAsk questions and defining problemsDevelop and use modelsEngage in argument from evidenceObtain, evaluate, and communicate information Plan and carry out investigationsUse mathematics and computational thinking |
| Forces and motionTypes of interactionsEnergy and forcesConservation of energyEnergy Transfer | SoundLight | Structure and properties of matterChemical reactions | Forces and motionTypes of interactions | EnergyConservation of energy and energy transferRelationship between energy and forcesEnergy in chemical processes and everyday lifeWave propertiesLightElectricityMagnetism | Structure and properties of matterChemical reactionsTypes of interactionsEnergy in chemical processes and everyday lifeOrganization for matter and energy flow in organisms |
| Matter and energy flow in organisms | Structure and functionGrowth and development of organismsInheritance of traitsVariation of traits | Interdependent relationships in ecosystemsBiodiversity and humans | Growth and development of organismsInteractions and group behaviorInheritance of traitsVariation of traitsEcosystem dynamics, function, resilienceEvidence of common ancestry and diversityNatural selectionAdaptationBiodiversity and humans | Structure and functionInformation processing | Organization for matter and energy flow in organismsInterdependent relationships in ecosystemsCycles of matter and energy transfer in ecosystems |
| Weather and climateBiogeologyHuman impact on Earth systemsNatural resourcesNatural hazards | Universe and starsEarth and solar system | History of planet EarthEarth materials and systemsPlate tectonics and large scale system interactionsRoles of water in Earth’s surface processes | Weather and climateNatural hazards | History of planet EarthEarth materials and systemsPlate tectonics and large scale system interactionsBiogeologyNatural resourcesNatural hazards | The universe and its starsEarth and the solar systemEarth materials and systemsRoles of water in Earth’s surface processesHuman impact on Earth systems |