**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 effect  Patterns  Systems and system models | Cause and effect  Patterns  Structure and function | Cause and effect  Energy and matter: flows, cycles, and conservation  Patterns  Stability and change Structure and function | Cause and effect Patterns  Scale, proportion, and quantity  Systems and system models | Energy and matter  Cause and effect  Patterns  Systems and system models | Cause and effect  Energy and matter  Patterns  Scale, proportion, quantity  Systems and system models |
| Analyze and interpret data  Ask questions and define problems  Construct explanations and design solutions  Develop and use models  Engage in argument from evidence  Obtain, evaluate, and communicate information  Plan and carry out investigations | Analyze and interpret data  Ask questions and define problems  Construct explanations and design solutions  Obtain, evaluate, and communicate information  Plan and carry out investigations | Analyze and interpret data  Ask questions and define problems  Construct explanations and design solutions  Develop and use models  Engage in argument from evidence Plan and carry out investigations  Obtain, evaluate, and communicate information | Analyze and interpret data  Ask questions and defining problems  Construct explanations and design solutions Develop and use models  Engage in argument from evidence  Obtain, evaluate, and communicate information  Plan and carry out investigations | Analyze and interpret data  Ask questions and defining problems  Construct explanations and design solutions  Develop and use models  Engage in argument from evidence  Obtain, evaluate, and communicate information  Plan and carry out investigations | Analyze and interpret data  Ask questions and defining problems  Develop and use models  Engage in argument from evidence  Obtain, evaluate, and communicate information  Plan and carry out investigations  Use mathematics and computational thinking |
| Forces and motion  Types of interactions  Energy and forces  Conservation of energy  Energy Transfer | Sound  Light | Structure and properties of matter  Chemical reactions | Forces and motion  Types of interactions | Energy  Conservation of energy and energy transfer  Relationship between energy and forces  Energy in chemical processes and everyday life  Wave properties  Light  Electricity  Magnetism | Structure and properties of matter  Chemical reactions  Types of interactions  Energy in chemical processes and everyday life  Organization for matter and energy flow in organisms |
| Matter and energy flow in organisms | Structure and function  Growth and development of organisms  Inheritance of traits  Variation of traits | Interdependent relationships in ecosystems  Biodiversity and humans | Growth and development of organisms  Interactions and group behavior  Inheritance of traits  Variation of traits  Ecosystem dynamics, function, resilience  Evidence of common ancestry and diversity  Natural selection  Adaptation  Biodiversity and humans | Structure and function  Information processing | Organization for matter and energy flow in organisms  Interdependent relationships in ecosystems  Cycles of matter and energy transfer in ecosystems |
| Weather and climate  Biogeology  Human impact on Earth systems  Natural resources  Natural hazards | Universe and stars  Earth and solar system | History of planet Earth  Earth materials and systems  Plate tectonics and large scale system interactions  Roles of water in Earth’s surface processes | Weather and climate  Natural hazards | History of planet Earth  Earth materials and systems  Plate tectonics and large scale system interactions  Biogeology  Natural resources  Natural hazards | The universe and its stars  Earth and the solar system  Earth materials and systems  Roles of water in Earth’s surface processes  Human impact on Earth systems |