GSE Science 4th Grade Curriculum Map 2021-2022

These are bundles of core ideas from the Georgia Standards of Excellence for Fourth Grade related to an anchoring phenomenon.

Instructional Segment:	Water Cycle and Forecasting the Weather	Stars and Planets	Earth and the Moon	Role of Organisms and Flow of Energy	Sound	Light	Forces and Motion
Estimated Time	9 weeks	5 weeks	4 weeks	4 weeks	5 weeks	4 weeks	5 weeks
Crosscutting Concepts	● Patterns ● Energy and Matter	● Patterns ● Systems and System Models ● Scale, Proportion, and Quantity	● Patterns ● Cause and Effect ● Scale, Proportion, and Quantity ● Systems and System Models	● Energy and Matter ● Structure and Function	● Energy and Matter	● Energy and Matter	● Energy and Matter ● Cause and Effect
Anchoring Phenomenon	● What is Weather like in Space? ● NOAA's GOES-16 Satellite Sends 1st Images from Space	● Where is the edge of the Solar System? ● Space X CRS-12 Launches to the ISS	● Seeing the Moon During the Day ● Total Solar Eclipse	● Eating on the Space Station ● Dessert in Space	● Singer shatters glass with his voice. ● Breaking Glass with Sound ● Visualizing vibrations using guitar strings	● Gazing at Earth's Light Show ● Light Language – look at picture of a reflection in water	● Small Rube Goldberg Machines ● Dream of a world without machines - activity
Core Ideas	● States of water ● Water cycle ● Weather instruments ● Weather maps ● Cloud types and formations	● Technological advances for space ● Stars ● Planets	● Moon phases ● Earth's orbit and tilt ● Light refraction	● Ecosystems ● Food chains/ webs ● Changes impacting ecosystems ● Scarcity, extinction, overabundance	● Strength and speed of sound vibration ● Communication device	● Opaque, transparent, translucent ● Reflection ● Refraction	● Balanced and unbalanced forces ● Gravitational force ● Simple machines

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	• Weather and climate						
Science and Engineering Practices	• Ask questions • Analyzing and interpreting data • Constructing explanations • Obtaining, evaluating, and communicating • Developing and using models • Planning and carrying out investigations	• Asking questions • Developing and using models • Constructing explanations • Engaging in argument from evidence • Obtaining, evaluating, and communicating	• Asking questions • Developing and using models • Constructing explanations • Engaging in argument from evidence Obtaining, evaluating, and communicating	• Asking questions and defining problems • Developing and using models • Constructing explanations and designing solutions • Obtaining, evaluating, and communicating	• Asking questions • Developing and using models • Planning and carrying out investigations • Designing solutions • Obtaining, evaluating, and communicating	• Asking questions • Developing and using models • Planning and carrying out investigations • Designing solutions • Obtaining, evaluating, and communicating	• Asking questions and defining problems • Constructing an argument from evidence • Developing and using models • Analyzing and interpreting data • Obtaining, evaluating, and communication
GSE	**S4E3**a,b; **S4E4**a, b, c, d	**S4E1**a, b, c, d	**S4E2**a, b, c	**S4L1**a, b, c, d	**S4P2**a, b	**S4P1**a, b, c	**S4P3**a, b, c