



High School Physics Curriculum Map

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

This document is part of a framework that includes lesson and resources.

| Instructional Segment | Kinematics | Force and Motion | Energy and Momentum | Waves | Electricity and Magnetism | Modern and Nuclear Physics |
|------------------------------|---|---|--|--|---|--|
| Estimated Time | 5 weeks | 7 weeks | 6 weeks | 8 weeks | 8 weeks | 2 Weeks |
| Crosscutting Concepts | <ul style="list-style-type: none"> • Cause and Effect • Patterns • Stability and Change • Scale, Proportion, and Quantity | <ul style="list-style-type: none"> • Cause and Effect • Scale, Proportion, and Quantity • System and System Models | <ul style="list-style-type: none"> • Energy and Matter • Scale, Proportion, and Quantity • System and System Models • Cause and Effect | <ul style="list-style-type: none"> • Cause and Effect • Patterns • Energy and Matter | <ul style="list-style-type: none"> • Cause and Effect • Patterns • Energy and Matter • Scale, Proportion, and Quantity | <ul style="list-style-type: none"> • Energy and Matter • Scale, Proportion, and Quantity • Stability and Change |
| Anchoring Phenomenon | A ball dropped and a ball launched horizontally will hit the ground at the same time. | How does mass affect the rate of free fall acceleration and force? | Energy is conserved with a spring or elastic pop-up toy. | When light is passed through a small slit, the light diffracts into predictable and measurable patterns. | Electrostatic demonstrations | Areas around nuclear accidents remain unsafe for years. |
| Core Ideas | <ul style="list-style-type: none"> • One and Two-Dimensional Motion • Graphing Motion • Vectors: Resultants & Components | <ul style="list-style-type: none"> • Motion and Forces • Newton's Laws • Types of Interactions • Circular Motion and Forces | <ul style="list-style-type: none"> • Energy • Energy Transformations • Momentum and Impulse • Collisions | <ul style="list-style-type: none"> • Wave Properties • Wave Behavior • Sound • Electromagnetic Radiation | <ul style="list-style-type: none"> • Static Electricity • Current • Electric Circuits • Magnetism • Electromagnetism | <ul style="list-style-type: none"> • Fission and Fusion • Radioactive Decay • Half-Life |
| Science and | Obtaining, Evaluating, and Communicating Information | | | | | |

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|------------------------------|---|--|--|---|--|--|
| Engineering Practices | <ul style="list-style-type: none"> • Planning and Carrying Out Investigations • Analyzing and Interpreting Data • Asking Questions and Defining Problems | <ul style="list-style-type: none"> • Constructing Explanations • Developing and Using Models • Using Mathematics and Computational Thinking • Planning and Carrying out Investigations | <ul style="list-style-type: none"> • Asking Questions and Defining Problems • Using Mathematics and Computational Thinking • Engaging in Argument from Evidence • Planning and Carrying out Investigations | <ul style="list-style-type: none"> • Developing and Using Models • Engaging in Argument from Evidence • Planning and Carrying Out Investigations | <ul style="list-style-type: none"> • Developing and Using Models • Planning and Carrying Out Investigations • Constructing Explanations | <ul style="list-style-type: none"> • Developing and Using Models • Engaging in Argumentation from Evidence |
| GSE | SP1. a, b, c, d | SP2. a, b, c, d, e | SP3. a, b, c, d | SP4. a, b, c, d, e, f, g | SP5. a, b, c, d, e | SP6. a, b, c |