| **LGHS STUDENT GUIDE**  |
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| **Content:** **Physical Science** | **Unit #:** **Motion & Force** | **Duration:** **3.5 Weeks**   |
| **Standards:** **SPS8. Obtain, evaluate, and communicate information to explain the relationship among force, mass, and motion.**1. Plan and carry out an investigation to analyze the motion of an object using mathematical and graphical models.
2. Construct an explanation based on experimental evidence to support the claims presented in Newton’s three laws of motion.
3. Analyze and interpret data to identify the relationship between mass and gravitational force for falling objects.
4. Use mathematics and computational thinking to identify the relationships between work, mechanical advantage, and simple machines.
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| **WHERE AM I GOING**  |
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| **Graduate Outcomes: *I will understand and analyze forces, mass, motion, and interactions through scientific processes and practices.*** |
| **Unit Performance Task*** **SPS8.a**
	+ Speed Lab
* **SPS8.d**
	+ Simple Machines Lab
 | **Unit Assessments and Quizzes** * Pre-test - this will be used to acquire your base standards level. You will work up from here!
* Quiz - this will be a shorter form of the unit summative assessment/test
* Unit Summative Assessment - this will be your final standardized assessment for this unit
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| **How I’ll Get There** |
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| **Vocabulary for Unit Link** [**Here**](https://docs.google.com/document/d/14HftSFVg27HNgqm1qtdiiFQD47BRu6UaTajaQKkDj7Y/edit?usp=sharing) | Vocab worksheets will be available to you during quizzes if completed by the specified date. |
| **Assessment Tracking - Learning Targets Linked** [**Here**](https://docs.google.com/document/d/11GJw9qqLlhCj_WWOzcuabXCvxC69pWARYgKr-A117VY/edit?usp=sharing) |
|  | **Pre-test**Score: \_\_\_\_ | **Based on my pre-test data, I need to**: | **Post-test**Score: \_\_\_\_\_ |
| **Approximate Days** |  **Tasks** | **Scoring Criteria** | **Resources** | **Learning Targets** | **Tracking Progress** |
| **Week 1 - Day 1** | Lab Safety Video & Rules | Folder (used for quizzes) |  |  | Initials: \_\_\_ |
| **Week 1 - Day 2** | 1.3 Measurement Guided Notes  | Folder (used for quizzes) | [Video](https://youtu.be/AThjtOnfzOY?si=Jjf7VGN4uElSIqLb)[Measurement Notes Link](https://docs.google.com/document/d/10y6czJOzLACC1WYJZh8bCGKvrE23VMaT/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) |  | Initials: \_\_\_\_ |
| **Week 1 - Day 3** | 11.1 & 11.2 Distance & Displacement, Speed & Velocity Notes & Lesson Videos  | Folder (used for quizzes) | * [Notes Link](https://docs.google.com/document/d/13cEKPc6TqTrtj9Jwfm0ELc-mqNvYb2-M/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)
* [11.1 Video](https://youtu.be/dAwl3Lfx8XY)
* [11.2 Video](https://youtu.be/WhbiXCWMOZQ)
 | SPS8.a #1-9 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 1 - Day 4** | 11.3 Acceleration Guided Notes & Lesson Video | Folder (used for quizzes) | * [Notes Link](https://docs.google.com/document/d/13cEKPc6TqTrtj9Jwfm0ELc-mqNvYb2-M/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)
* [11.3 Video](https://youtu.be/7C2gK29kY3g)
 | SPS8.a #10-11 | Score or Initials: \_\_\_\_\_\_\_ |
|  | [Mythbusters Bullet Experiment Video](https://schoolwires.henry.k12.ga.us/cms/lib/GA01000549/Centricity/Domain/3700/MythBusters%20Bullet%20Fired%20Dropped.mp4) | Informational | [Video Link](https://drive.google.com/file/d/18GqZ9EWGuyTLWR_bkjrVXcjpq_SJaTYY/view?usp=sharing) | SPS8.b #1-2 |  |
| **Week 1 - Day 5** | Lab Safety QuizLab Notebook Setup |  |  |  |  |
| **Week 2 - Day 1** | 12.1 Forces Guided Notes & Lesson Video | Folder (used for quizzes) | [Notes Link](https://docs.google.com/document/d/1rFt7X7zW97yFeDwemC8lRud3tuqLxMUp/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)[12.1 Video](https://youtu.be/DrlEp-kZcAA) | SPS8.b #1-2 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 2 - Day 2** | 12.2 & 12.3 Newton’s Laws of Motion Guided Notes & Lesson Videos | Folder (used for quizzes) | [Notes Link](https://docs.google.com/document/d/1rFt7X7zW97yFeDwemC8lRud3tuqLxMUp/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)[12.2 Video](https://youtu.be/-HejKbuo2jc)[12.3 Video](https://youtu.be/DB44Zrpwzw4) | SPS8.b #1-10 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 2 - Day 3** | 12.4 Universal Forces Guided Notes & Lesson Videos14.1 Work & Power Notes & Video[Hammer and Feather Drop on the Moon Video](https://schoolwires.henry.k12.ga.us/cms/lib/GA01000549/Centricity/Domain/3700/Feather%20%20Hammer%20Drop%20on%20Moon.mp4) | Folder (used for quizzes) | [Notes Link](https://docs.google.com/document/d/1rFt7X7zW97yFeDwemC8lRud3tuqLxMUp/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)[12.4 Video](https://youtu.be/5mX531pHEjE)[Youtube link](https://youtu.be/l7tEA8Vtc0o)14.1 Video | SPS8.c #1-7 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 2 - (used on days 2-4)** | Unit 1 Practice Sheet | Folder (used for quizzes) | [Practice Sheet Link](https://docs.google.com/document/d/1MytULknjTB3WF_Aea56kcisjg42hu3xF/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) | Covers all learning targets | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 2 - Day 5** | Speed & Acceleration Lab | Lab Notebook Check Grade | [Speed Lab](https://docs.google.com/document/d/1rNo15guaJQ1ecjp5klW4durusZRAQBTn/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)[Acceleration Lab](https://docs.google.com/document/d/1oQ--N4l9ELtX-YVeXj88zoqzs4snc1Tp/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) | SPS8.a #10-11 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 3 - Days 1&2** | Work, Power, & Displacement Notes (14.1 - 14.4) & Lesson VideosUnit 1 Practice Sheet | Folder (used for quizzes) | [Notes Link](https://docs.google.com/document/d/1haRjDR7olIerXyzfiZwPk0b1XORlBHts/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true)[14.1 Video](https://youtu.be/J6oXQ4HGHVU)[14.2 Video](https://youtu.be/yZlN1FwwJ6c)[14.3 Video](https://youtu.be/5GAPGKGTIrw)[14.4 Video](https://youtu.be/wDD4fykPT6E) | SPS8d #1-8 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 3 - Day 3** | Unit 1 KahootAll folder assignments due | Review |  | All learning targets | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 3 - Day 4** | Lab 2 Simple Machines | Lab Notebook | [Lab Link](https://docs.google.com/document/d/1rXtyExA3gdGQMqCspBzrrDeuUGd3ZdG1/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) | SPS8d #1-8 | Score:\_\_\_\_ |
| **Week 3 - Day 5** | * Unit 1 Quiz
* Begin Study Guide
 | Quiz Grade |  | SPS8.a #10-11 | Score: \_\_\_\_\_\_\_ |
| **Week 4 - Day 1** | * Complete Unit 1 Study Guide
 | Folder (used for quizzes) | [Study Guide](https://docs.google.com/document/d/1aCxoZW2ZUfqBhBKG4upm5tLvjlWLPwue/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) | SPS8d #1-8 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 4 - Day 2** | * Go over Unit 1 Study Guide
 | Bonus | [Study Guide](https://docs.google.com/document/d/1aCxoZW2ZUfqBhBKG4upm5tLvjlWLPwue/edit?usp=sharing&ouid=111007569953600045879&rtpof=true&sd=true) | All learning targets | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 4 - Day 3** | * Unit 1 Review Game
 | Review |  | SPS8d #1-8 | Score or Initials: \_\_\_\_\_\_\_ |
| **Week 4 - Day 4** | * Unit 1 Test
 | Test Grade |  | All learning targets | Score: \_\_\_\_\_ |