|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **Pre-Planning: Unpacking the Standards** | **TEKS:**(R) - Readiness Standard(S) -Supporting Standard | Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion.Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration**Ⓡ SCI.8.6C** Investigate and describe applications of Newton’s law of inertia, law of force and acceleration and law of action-reaction, such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. | Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion.Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration**Ⓡ SCI.8.6C** Investigate and describe applications of Newton’s law of inertia, law of force and acceleration and law of action-reaction, such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. | Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion.Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration**Ⓡ SCI.8.6C** Investigate and describe applications of Newton’s law of inertia, law of force and acceleration and law of action-reaction, such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. | Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion.Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration.**Ⓡ SCI.8.6C** Investigate and describe applications of Newton’s law of inertia, law of force and acceleration and law of action-reaction, such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. | Ⓡ SCI.8.6A Demonstrate and calculate how unbalanced forces change the speed or direction of an object’s motion.Ⓢ SCI.8.6B Differentiate between speed, velocity and acceleration.**Ⓡ SCI.8.6C** Investigate and describe applications of Newton’s law of inertia, law of force and acceleration and law of action-reaction, such as in vehicle restraints, sports activities, amusement park rides, Earth’s tectonic activities, and rocket launches. |
| **Verb(s)**- What verbs define the actions students will need to take when mastering this objective? | * Demonstrate
* Calculate
* Differentiate
 | * Demonstrate
* Calculate
* Differentiate
 | * Demonstrate
* Calculate
* Differentiate
 | * Demonstrate
* Calculate
* Differentiate
 | * Demonstrate
* Calculate
* Differentiate
 |
| **Concept** -What am I teaching? -What do the students need to know? | Balanced and unbalanced forces Types of forces | Balanced and unbalanced forces Types of forces | Speed, distance ,directionTypes of forces | Speed, distance ,directionTypes of forces | Balanced and unbalanced forces Speed, distance ,directionTypes of forces |
| **Context*****Readiness:**** Connections from previous grade level.
* To what degree will this impact learning two years down the road?

***Supporting:**** What Readiness Standards or concepts from the Readiness Standards does it support?
* How does it support the Readiness Standards?
 | **In Grade 6, students:**\* identified and described the changes in position, direction, and speed of an object when acted upon by forces,calculated average speed using distance and time measurements, and measured and graphed changes in motion**In Grade 7, students:**\* demonstrated and illustrated forces that affect motion in everyday life | **In Grade 6, students:**\* identified and described the changes in position, direction, and speed of an object when acted upon by forces,calculated average speed using distance and time measurements, and measured and graphed changes in motion**In Grade 7, students:**\* demonstrated and illustrated forces that affect motion in everyday life | **In Grade 6, students:**\* identified and described the changes in position, direction, and speed of an object when acted upon by forces,calculated average speed using distance and time measurements, and measured and graphed changes in motion**In Grade 7, students:**\* demonstrated and illustrated forces that affect motion in everyday life | **In Grades 6, students:**\* identified and described the changes in position, direction, and speed of an object when acted upon by forces,calculated average speed using distance and time measurements, and measured and graphed changes in motion**In Grade 7, students:**\* demonstrated and illustrated forces that affect motion in everyday life | **In Grades 6, students**:\* identified and described the changes in position, direction, and speed of an object when acted upon by forces,calculated average speed using distance and time measurements, and measured and graphed changes in motion**In Grade 7, students**:\* demonstrated and illustrated forces that affect motion in everyday life |
| **I will know my students have mastered this standard when they can….** | Differentiate and demonstrate the 3 laws of motion  | Differentiate and demonstrate the 3 laws of motion | Differentiate and demonstrate the 3 laws of motion | Differentiate and demonstrate the 3 laws of motion | Differentiate and demonstrate the 3 laws of motion |
| **I will assess the standard by…..** | Plickers, cold calls, asking leading questions  | Plickers, cold calls, asking leading questions | Plickers, cold calls, asking leading questions | Plickers, cold calls, asking leading questions | Plickers, cold calls, asking leading questions |
| **Vocabulary**(Academic and Content) | * balanced forces
* unbalanced forces
* kinetic energy
* acceleration
* reference point
* momentum
* **velocity**
* **potential energy**
* **reference point**
* **net force**
* Newton’s Laws of Motion
 | * balanced forces
* unbalanced forces
* kinetic energy
* acceleration inertia
* reference point
* momentum
* **velocity**
* **potential energy**
* **reference point**
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* **net force**
* Newton’s Laws of Motion
 |
| **Lesson Topic** (Content Objective) | * Balanced and unbalanced forces
* Speed , Velocity and Acceleration
* Newton’s Laws of Motion
 | * Newton’s Laws of Motion
* Balanced and unbalanced forces
* Speed , Velocity and Acceleration
 | * Balanced and unbalanced forces
* Speed , Velocity and Acceleration
* Newton’s Laws of Motion
 | * Balanced and unbalanced forces
* Speed , Velocity and Acceleration
* Newton’s Laws of Motion
 | * Balanced and unbalanced forces
* Speed , Velocity and Acceleration
* Newton’s Laws of Motion
 |
| **ELPS** (Language Objective) | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English.
* ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment.
* ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.

ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. | * ELPS C.1a Use prior knowledge and experiences to understand meanings in English.
* ELPS C.1e Internalize new basic and academic language by using and reusing it in meaningful ways in speaking and writing activities that build concept and language attainment.
* ELPS C.4g Demonstrate comprehension of increasingly complex English by participating in shared reading, retelling or summarizing material, responding to questions, and taking notes commensurate with content area and grade level needs.

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ELPS C.5b Write using newly acquired basic vocabulary and content-based grade-level vocabulary. |
| **Lesson Cycle** | **Engage:** **Warm-Up/Opening** **(5 min)** | The Big Idea,’ p. 178, |  |   | Spiral in 8.6 A,B & C  |  |
| **Explore:****INM/Review (0 min):** | Station labs to explore the laws of motion  | Complete Station labs to explore the laws of motion | Complete Station labs to explore the laws of motion | Station Labs for spiraled TEKS for review  |   |
| **Explain:****Guided Practice**  |  | Edusmart video and simulation | Edusmart video and simulation |  |  |
| **Elaborate:****Independent Practice (20 min):** |  | Students use simple experiment to demonstrate laws of motion. Students should include a testable hypothesis along with steps to follow to conduct the investigation. | Students use simple experiment to demonstrate laws of motion. Students should include a testable hypothesis along with steps to follow to conduct the investigation |  |  |
| **Evaluate:****Closing (5 min.):** |  | Exit Ticket : one example each of 3 laws of motion. | Exit Ticket : one example each of 3 laws of motion. | EXIT TICKET  | Common Assessment  |
| **Reinforcement** | **Materials/ Resources:** |  |  |  |  |  |
| **Homework** | 3 Questions from homework calendar. | 3 Questions from homework calendar. |  | Study for Common Assessment. |  |
| **MODIFICATIONS and/or ACCOMODATIONS:***-Gifted and Talented**-ELL/ ESL**-Special Education* | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student | Shortened Assignments, Highlight key vocabulary, Print Lectures for Student |

**\*All lesson plans are subject to revisions and addendums by teacher.**