## Introduction

Welcome to this innovative unit, where we will explore the timeless tale of Romeo and Juliet by William Shakespeare, while incorporating the fundamental principles of physics, specifically the three laws of motion.

This interdisciplinary approach will not only deepen your understanding of the literary classic but also provide a unique perspective on the physical world.

## **Foundation Level Questions**

- 1. Who are the main characters in Romeo and Juliet? Describe their personalities and motivations.
- 2. What is the first law of motion (inertia)? Provide a simple example from the play to illustrate this concept.
- 3. Complete the graphic organizer below to analyze the characters' motivations:

Character	Motivation	Conflict
Romeo		
Juliet		
Tybalt		

Core Level Questions
<ol> <li>Analyze the relationship between Romeo and Juliet, exploring their conflicts and motivations. Use evidence from the play to support your answer.</li> <li>Explain the second law of motion (force and acceleration) using a scene from the play as an example.</li> <li>Write a short essay comparing and contrasting the characters of Romeo and Juliet.</li> </ol>
Extension Level Questions
<ol> <li>Create a scene or dialogue that illustrates the third law of motion (action and reaction). Use characters from the play to demonstrate this concept.</li> <li>Research and present on the historical context of the play and the development of the laws of motion. How do these two subjects intersect?</li> <li>Design and create a visual art piece that represents the themes of the play and the laws of motion.</li> </ol>

Laws of Motion Scenarios
Read the following scenarios and identify which law of motion is being demonstrated:
<ol> <li>Romeo throws a stone into the river, and it skips across the water. Which law of motion is being demonstrated?</li> <li>Juliet's nurse pushes a heavy cart across the floor. What law of motion is at work here?</li> <li>Tybalt and Mercutio engage in a sword fight. Which law of motion is being demonstrated by their movements?</li> </ol>
Reflection and Conclusion
Individual Reflection:
<ol> <li>What was the most surprising thing you learned about the laws of motion and their connection to Romeo and Juliet?</li> <li>How will this learning change your understanding of the play and the physical world?</li> <li>What questions do you still have about the laws of motion and their application to real-world scenarios?</li> </ol>