

Appendix 1: Implementing Teaching Standards

North Carolina Science Essential Standards

5.P.1.1 Explain how factors such as gravity, friction, and change in mass affect the motion of objects.

5.P.1.2 Infer the motion of objects in terms of how far they travel in a certain amount of time and the direction in which they travel.

Students will explore the above standards through their experiment on speed. Students will discuss different concepts from Force and Motion, including Newton's Laws.

North Carolina Standards for Mathematical Practice

North Carolina Standards for Mathematical Practice #1: Students will make sense of problems and persevere in solving them.

North Carolina Standards for Mathematical Practice #2: Students will reason abstractly and quantitatively.

North Carolina Standards for Mathematical Practice #8: Look for and express regularity in repeated reasoning.

Students will utilize these Standards for Mathematical Practice as they explore just how hard a scientist's job really is. They will attempt to make sense of the data from our lab and discover the formula used to calculate speed. Students will also try to discover patterns in data by using their problem solving skills and then utilizing our robot scientist, Eureka.