**Energy, Machines, and Motion Course Outline**

**S8.C.2.1**  Describe energy sources, transfer of energy, or conversion of energy.

**S8.C.3.1** Describe the effect of multiple forces on the movement, speed, or direction of an object.

**Energy**

 **Circuit of Inquiries**

 **Making a Battery**

 **Rechargeable Batteries**

 **Storing and Using Energy in a Battery**

 **Introduction to Forces**

 **The Force of Friction**

 **The Force Exerted by a Motor**

 **Work and the Motor**

 **Power of a Motor**

 **Assessing What You Know**

**Machines**

 **The Inclined Plane**

 **The Pulley**

 **The Lever**

 **The Mechanical Advantages of Machines**

 **The Efficiency of Machines**

**Motion**

**Motion of Fan Car**

 **Motion of a Mousetrap Car**

 **The Roller Coaster**

 **Motion on a Roller Coaster**

