Lesson Plan

Class/grade:	Science 8
Date(s) taught:	5 days
Teacher:	Karen Morton

Lesson title:

Objects in Motion

Lesson objective(s):

Students will design and conduct an experiment testing one variable.
Students will measure distance and time.
Students will calculate speed by dividing distance by time.
Students will create tables and graphs to communicate results.
Students will design and create a visual presentation of their experiment.

Language/vocabulary:

force, friction, speed = distance/time

Materials/technology:

stopwatches, various materials of student choice, computer with presentation software, internet access

Standards met:

Observe, explain, and predict natural phenomena governed by Newton's laws of motion, acknowledging the limitations of their application to very small or very fast objects.
Identify and calculate the direction and magnitude of forces that act on an object, and explain the results in the object’s change of motion

Instructional plan:

Students work in teams, choose an object in motion and test the speed of the object with two different levels of friction. Then they create a presentation of their experiment on their choice of poster paper, PowerPoint, or Glogster. Finally they will present their project to the class.
Day 1 – Project is assigned (see attached worksheet), students choose partners, brainstorm and choose an object in motion to study, list materials and plan procedure. Homework is to bring in any materials not found in the lab that they may need.
Day 2 – Students conduct experiment and record results, begin creating presentation.
Day 3 – Students begin creating PowerPoint slide show, Glog or poster presentation.
Day 4 – Students finish presentation.

Day 5 – Students present projects to class.

Differentiation/accommodations:

Student choices with guidance on the appropriate level from teacher, collaborative groups, choice of presentation methods.

Assessment:

Teacher monitoring while experiments are in progress. Rubric for summative assessment.