Curriculum: West Shore SD 2009 Curriculum
Course: Physics

WEST SHORE SD
Date: May 21, 2009 ET

Topic: Translational Motion
Subject Area(s):

Days: 18
Grade(s):

Key Learning: **Objects that move in translational motion are described in terms of position, velocity, and acceleration.**

Unit Essential Question(s): **How can the motion of an object be described in a measurable and quantitative way?**

Concept: **a) kinematics** S11.C.3.1.3, S11.A.1.3.1, S8.A.2.1.1, S11.A.3.3.3, S11.A.1.1.4, S8.A.2.1.2, S8.A.2.1.4, S11.A.1.1.5, 3.1.12.D, 3.4.12.C	Concept: **b,c) vectors** S11.C.3.1.3, S8.A.2.1.1, 3.4.12.C	Concept: **d)projectile** S11.C.3.1.3, S8.A.2.1.4, S11.A.3.3.3, S11.A.1.1.4, S8.A.2.1.2, 3.1.12.D, 3.4.12.C
Lesson Essential Question(s): How is the position of an object can be measured and quantified? (A) How is the velocity of an object can be measured and quantified? (A) How is the acceleration of an object can be measured and quantified? (A) How are position, velocity, acceleration and time relatd? (ET)	**Lesson Essential Question(s):** How is the use of vectors different than that of scalars? (A) How do vectors allow the formulation of the physical laws independent of a particular coordinate system? (A) How do you separate vectors into their components? (A)	**Lesson Essential Question(s):** How can the motion of a projectile be represented and analyzed as two different motions? (A) How do you solve problems involving projectile motion (ET)
Vocabulary: Acceleration, Velocity, Position, Frame of Reference, Kinematics, Distance, Displacement, Average, Instataneous	**Vocabulary:** Vector, Scalar, magnitude, components, tip-to-tail, parallelogram, cosine, sine, Resultant	**Vocabulary:** Projectile, Parabolic,

Concept: **f) technological applications** S8.A.2.1.2, S8.A.2.1.4, S11.A.2.2.2, S11.A.1.1.4, 3.4.12.C	Concept:	Concept:
Lesson Essential Question(s): How are these concepts used in the design and evaluation of many technologies? (A)	**Lesson Essential Question(s):**	**Lesson Essential Question(s):**
Vocabulary: Technology	**Vocabulary:**	**Vocabulary:**

Additional Information:
Speed Trap Lab, Projectile Lab, Calculation of "g" Lab

Attached Document(s):