8th Grade – Science, Math, & PE

8th grade Science Standards:

**MS-ESS1- 4.**
Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth’s 4.6-billion-year-old history.

**MS-ESS3- 4.**
Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth’s systems.

**Learning Objectives (LO):**
Plate tectonics accounts for important features of Earth’s surface and major geologic events. As a basis for understanding this concept: a. Students know evidence of plate tectonics is derived from the fit of the continents; the location of earthquakes, volcanoes, and midocean ridges; and the distribution of fossils, rock types, and ancient climatic zones.

**Napa Valley Unified School District’s “4Cs”:** Critical Thinking, Collaboration, Communication, and Creativity

**Lesson Plan 2: Vine Trail Walkabout**
(IBL / PBL) Walkabout

**Guiding Question (GQ):**
How can we use our own body to measure distance trailed?
Day 7: Walkabout
Walk the Vine Trail and count the number of steps that you take. Convert your steps to meters (measure your step). Then calc. distance, total distance, time, total time, velocity, and avg. velocity. Materials- meter stick, stopwatch). As you travel the Vine Trail you will notice that there are informational signs that present information about the particular spot that you are in. Write down the number of this location for future reference. Take pictures and videos of several of these locations. You will use these pics/ videos for your Google Tour.