

# Ann Arbor Public Schools

## TAPPAN MIDDLE SCHOOL



### 6th Grade: Earth Science

#### -Structure and Properties of Matter:

Students learn that matter is made of particles and adding or removing energy changes the particle's behavior and phase of matter.

**-Sun, Earth, Moon System:** The Sun-Earth-Moon system has patterns of motion that can explain what we see in our sky (moon phases & eclipses) and what we experience as seasons. Students will generate and examine several models to refine their understanding of scale and patterns.

**-GeoScience:** Students examine geoscience processes and their effects on Earth's surface at varying times and spatial scales.

**-Water Cycle, Weather, Climate:** Students do investigations around trying to figure out how ice can be falling from the sky on a summer day, how clouds form, why some clouds produce storms with large amounts of precipitation and others don't, and how all that water gets into the air.

**-Ecosystems:** Students model ecological relationships within an ecosystem, simulate the effect of competition, predation and other factors on population size, and investigate local ecosystems.

Students modeling earthquake waves



### 7th Grade: Life Science

**-Organisms: Macro to Micro:** Students observe living, microscopic organisms from various kingdoms of life. They observe the life cycle of plants as they learn about photosynthesis and plant structures and reproduction. They learn about cells and their processes, and how genetic traits are passed from generation to generation.

**-Climate Change:** Students learn about factors that influence climate change and how human activity has an impact on changing climate.

**-Metabolic Reactions:** Students will learn how several body systems work together to keep a human body functioning.

**-Evolution:** Students examine how organisms change over time and how fossils can provide evidence for these changes.

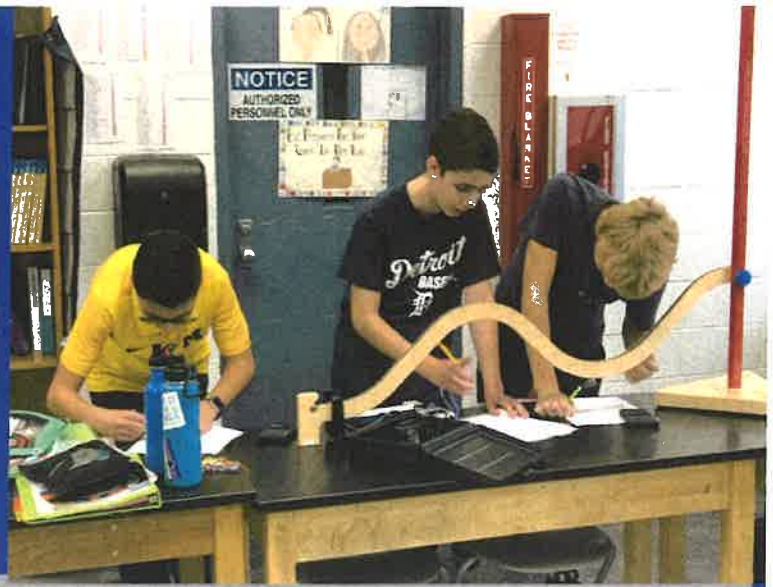


Students are observing the characteristics of living organisms in the Tappan garden!





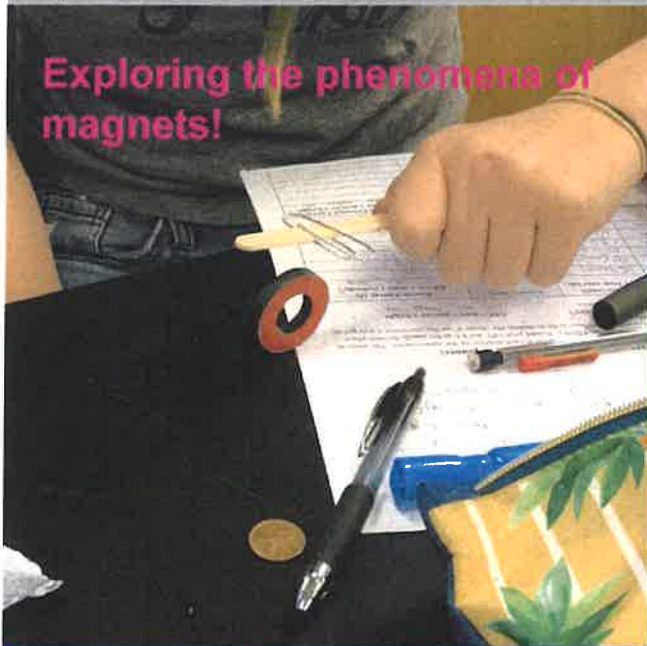
Students are examining the energy transformations of a marble on a rollercoaster and using lab data to support the law of conservation of energy!



## 8th Grade: Physical Science

- Motion (speed, acceleration, graphs of motion)
- Contact Forces and Newton's Laws
- Energy
- Sound and Light
- Physical Properties of Matter (mass, volume, density)
- Elements and the Periodic Table
- Molecules/Compounds
- Building CO<sub>2</sub> cars
- Electricity and Magnetism
- Phases of Matter
- Chemical Reactions

Exploring the phenomena of magnets!



## Tappan Science Teachers

Jack Devine

Sarah Frantom

Sue Baker

Jennifer Gleason

Myles Martin

Stacey Greene

\* As a district we're currently piloting curriculums in an attempt to adopt a new one across our middle grades. This will move us to an integrated approach and better align us with the NGSS.