

## **Plan: How can I help prepare students and myself for a great day of learning?**

The **Properties of and Changes in Matter** program is designed to enrich and expand the Grade 5 classroom STEM\* program by bringing the Ontario Science, Technology and Math curriculum to life through a hands-on, learning experience at Forest Valley Outdoor Education Centre.

\*An integrated application of Science, Technology, Engineering and Mathematics

### **Curriculum Connections:**

- [Science and Technology 1-8 Understanding Matter and Energy, Properties of and Changes in Matter \(pp.104-106\)](#)
- [Mathematics, Measurement, Data Management and Probability \(pp. 80-81,84-85\)](#)

### **Some guiding questions to support effective field trip planning:**

- Why did you choose **Properties of and Changes in Matter**?
- How does it integrate into your classroom program?
  - Is the field trip going to act as a “minds on” engagement where students formulate questions for inquiry?
  - Is the field trip an opportunity for students to gather evidence for an inquiry already in progress?
  - Is the field trip a culminating experience for students to apply their learning?

### **Possible Pre-Trip Experiences:**

- begin researching how things are made and make a tally of the primary natural resource that is used and whether matter has been changed chemically or physically and assess the environmental impact
- begin a Know, Wonder, Learn (KWL) chart based on the Framing Question (How does measuring changes in matter help us assess environmental impact?) to bring with you to Forest Valley
- review the states of matter and how it changes (e.g. water cycle)
- consider cooking a simple recipe with your students to explore physical and chemical changes in matter
- collect data about air temperature over a 2 week period, measure and record rainfall
- talk to your [Eco Schools](#) committee about a classroom or school wide energy conservation/ waste reduction class project

### **TDSB Web Resources** (note, these may only be accessible through a TDSB computer):

- [MediaNet](#) (Library & Learning Resources: Grade 5 Understanding Matter and Energy)
- [TDSB's Virtual Library](#).