

5<sup>th</sup> Grade  
High Performance Feature  
Tankless Hot Water Heaters

Measuring the temperature of hot water at two different locations

Students should be able to answer the following questions.

1. Does distance the water has to travel affect its temperature?
2. What are the benefits of tankless hot water systems?
3. What are the down falls of tankless hot water systems?



Teachers will discuss with the students the tankless hot water system in place at Snow Creek.

Students will visit the location of the hot water system and draw a diagram to compare to a typical hot water tank that they may find at their home.

Upon completion of the visit and drawing students will measure hot water temperatures at two different locations within the school. They will compare 1) Temperature 2) distance of the measure from the hot water source and 3) time taken to reach a sustained temperature.

**Materials Needed:**

Thermal Gloves (silicon)

Digital thermometers

Clipboards

Comparison chart

	Sustained Temperature	Time taken to reach sustained temperature
Location 1		
Location 2		

**Follow Up Questions:**

1. Did your temperatures eventually sustain equally?
2. Did your times differ? Why did the times differ?
3. How does distance from the tankless hot water heater affect temperature and time?