



Unit 1: Dead Zones

Lesson 2: Activity A – Investigating How Properties of Water Contribute to Seasonal Cycles

Data Sheet (Key)

Experiment start time: _____

Water temperature data chart (degrees Celsius)

Depth in cm	Time columns						
	#1	#2	#3	#4	#5	#6	#7
1							
3							
5							
9							
13							
17							
21							

Temperatures will vary

**250 ml ice water**Temperature: 0 - 4°CWeight: Varies**250 ml hot water**Temperature: Approximately 30°CWeight: Less than cold water (only a sensitive scale will detect the difference)**Which is more dense (weighs more)? (Circle one)**

Ice water

Hot water

250 ml warm water with colored ice cubesWhat happens to the colored water from the ice as the ice melts? Colored water sinks

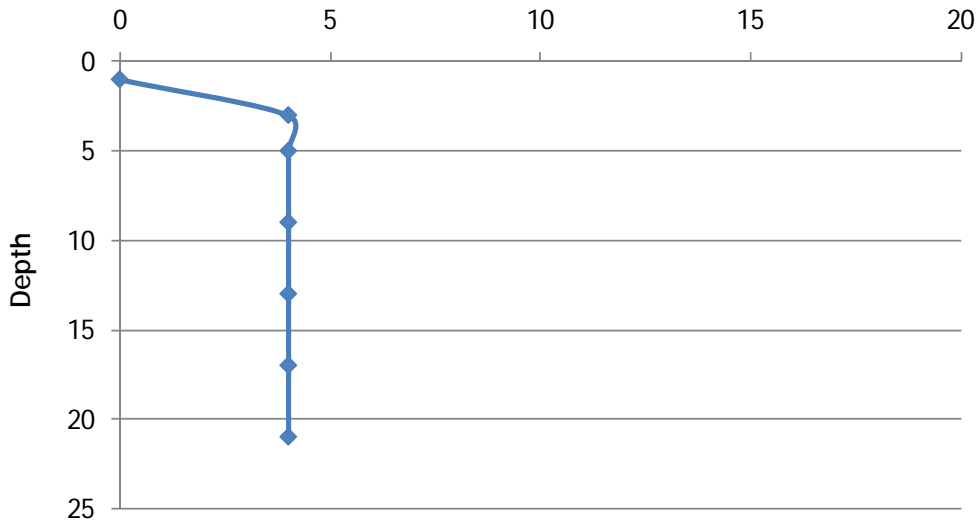
Why? As the ice melts, its colored water will sink because it is colder than the warm tap water. Eventually a cold layer of water will form at the bottom of the warm water, illustrating the stratification that occurs in lakes



Water temperature graphs

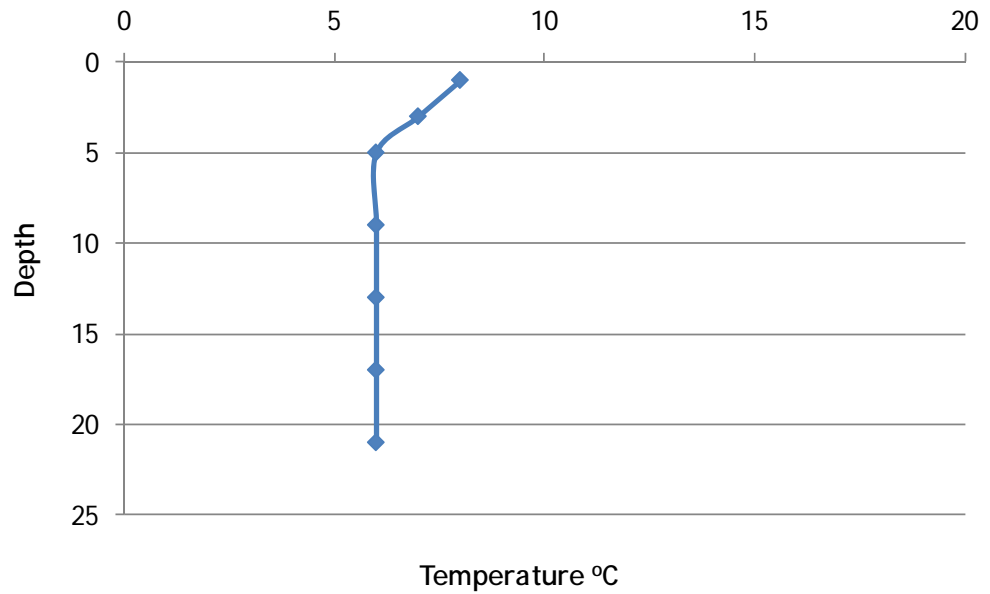
Graph #1 (from Data chart column #1)

Winter



Graph #2 (from Data chart column #2)

Spring turnover

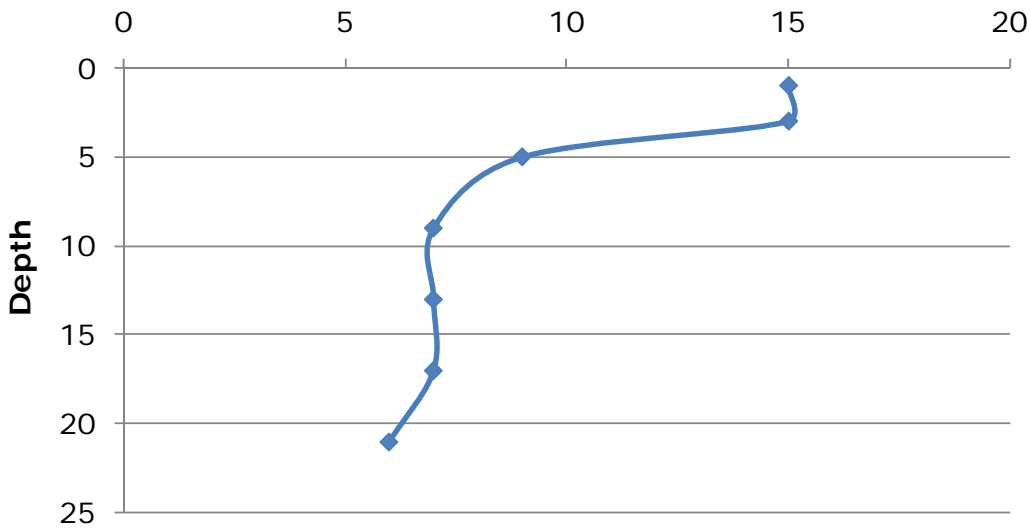




Water temperature graphs (continued)

Graph #3 (from Data chart column #3)

Summer stratification



Graph #4 (from Data chart column #4)

Fall turnover

