BRIGHTWATER WINTER WATER STUDIES

Possible Inquiry Focus: Is Water Alive? What is water and its properties? Why is it important? What is our responsibility to water? How do we show respect for water? How has water shaped the prairie landscape? Who studies Water and in what ways?

Pre-Visit Learning: With students develop Inquiry focus, student learning expectations and data collection sheets to be used at Brightwater; Begin discussing questions around water body formations, quality, use, properties of water etc.

Outcomes:

Grade 8 Science - CS8.1; CS8.2; WS 8.1; WS8.2; WS 8.3**; Social Studies** RW 8.3**; Career Ed:** CC8.1

Native Studies 10 – Unit 1; Unit 4

Grade 10 Science – CI1; SCi10-CDI

Environmental Studies 20 – CE1; SDS1; AS1; AS2

Time: 90 minute session recommended; Group Rotation Size: 10 Grade 8; 15 Grade 10 & 11; 60 min and/or Traditional Knowledge Keeper 1 hour session for class size up to 30 in the tipi.

Circle Introduction:

Sharing of stories that illustrate current societal and Indigenous value systems in relation to water. Or possibly meet with a Traditional Knowledge Keeper to learn about past and present First Nation's relationships with water.

Water Systems Study:

Hike to spring, taking notice of animal signs on the way. What would have been the importance of this spring to past cultures in the winter? Where does the water in the creek come from? Where does it go? Who is using it? Why does the spring flow all winter? Where does it come from? Glacial history, ground water, spatial topography in relation to water movement.

Possible Data Collection Activities:

Spring can be tested and data recorded by the students for Temperature, PH, Turbidity, Nitrates and Dissolved Oxygen as well as visual observations. Water can be collected from the spring and brought back to the center to explore under microscopes and stereoscopes. This gives the students a chance to be fascinated by the power of increased vision to see living creatures swimming around, eating algae and being unharmed in our pursuit of understanding. Samples collected with the first group are return to the spring with the last group, showing our respect and responsibility to the creatures of this aquatic habitat.

Closing Circle:

Students individually share their thoughts about the Inquiry question(s) under study.

Assessment: observations, questioning, answering questions, closing circle participation, data collection sheets

Post-Visit Learning: Analysis of data collected by the groups; continues study/research into various aspects of current water issues