

## Science Process Skills

<b>SPS1– Scientific Inquiry and Critical Thinking Skills (INQ)</b>		
	<b>By the end of Grade 11, all students will apply skills from previous grades and...</b>	<b>By the end of Grade 12, advanced students will apply skills from previous grades and...</b>
1. MAKING OBSERVATIONS AND ASKING QUESTIONS	<p>S:SPS1:11:1.1 Ask questions about relationships among variables that can be observed directly as well as those that cannot.</p> <p>S:SPS1:11:1.2 Use complex classification criteria and keys to identify items/organisms.</p> <p>S:SPS1:11:1.3 Evaluate complex methods of classification for a specific purpose.</p> <p>S:SPS1:11:1.4 Identify limitations of a given classification system and identify alternative ways of classifying to accommodate anomalies.</p>	<p>S:SPS1:12:1.1 Define and delimit problems to facilitate investigation.</p> <p>S:SPS1:12:1.2 Make and record measurements to the correct number of significant figures based on the precision of the instrument used.</p> <p>S:SPS1:12:1.3 Make measurements and observations about a variety of events and phenomena, including those that occur during very small and very large time frames.</p> <p>S:SPS1:12:1.4 Ask questions about relationships between and among observable variables as well as theoretical entities.</p> <p>S:SPS1:12:1.5 Use, evaluate and apply complex classification schemes based on an understanding of scientific concepts, laws and principles.</p> <p>S:SPS1:12:1.6 Describe and apply classification systems and nomenclatures used in the sciences.</p>
2. DESIGNING SCIENTIFIC INVESTIGATIONS	<p>S:SPS1:11:2.1 Apply scientific theories and laws to new situations to generate hypotheses.</p> <p>S:SPS1:11:2.2 State a hypothesis and prediction based on available evidence and background information.</p>	<p>S:SPS1:12:2.1 Identify the theoretical basis of an investigation and develop a prediction and a hypothesis that are consistent with the theoretical basis.</p> <p>S:SPS1:12:2.2 Evaluate and select appropriate instruments for collecting data and evidence in an investigation.</p> <p>S:SPS1:12:2.3 Develop appropriate sampling procedures for a given investigation.</p>