

Grade	Questioning and Predicting	Planning and Conducting	Processing and Analyzing data	Evaluating	Applying and Innovating	Communicating
K and up	<ul style="list-style-type: none"> <li>• <b>curiosity, questioning</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>observe</b></li> <li>• <b>manipulate</b> materials</li> <li>• non-standard <b>measuring</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>interpret environment</b></li> <li>• recognize <b>First People’s knowledge sharing</b></li> <li>• <b>discuss observations</b></li> <li>• <b>draw observations</b></li> </ul>		<ul style="list-style-type: none"> <li>• <b>care for self and community</b></li> <li>• <b>apply learning to new situations</b></li> <li>• <b>generate new ideas when problem solving</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>oral sharing</b></li> <li>• <b>express personal experiences of place</b></li> </ul>
1 and up	<ul style="list-style-type: none"> <li>• simple <b>predictions</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>record</b> observations</li> <li>• manipulate materials to test ideas</li> </ul>	<ul style="list-style-type: none"> <li>• <b>classify data</b></li> <li>• <b>pictographs and tables</b></li> <li>• <b>compare observations with predictions</b></li> <li>• <b>identify patterns</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>compare observations</b> with those of others</li> <li>• consider <b>environmental consequences</b> of actions</li> </ul>		<ul style="list-style-type: none"> <li>• <b>written and role-play communication</b></li> </ul>
3 and up	<ul style="list-style-type: none"> <li>• questions for investigation</li> <li>• predictions on prior knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• suggest ways to <b>plan inquiries</b></li> <li>• <b>ethical responsibilities</b></li> <li>• use <b>tools</b> for <b>formal measuring</b></li> <li>• simple <b>data collection</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>First People’s knowledge as information source</b></li> <li>• use <b>tables, bar graphs</b> to represent data</li> <li>• <b>compare results with predictions</b></li> </ul>	<ul style="list-style-type: none"> <li>• make <b>simple inferences</b></li> <li>• <b>fair testing, appreciate evidence</b></li> <li>• identify <b>implications of others’ actions</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>co-operatively design projects</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>diagrams, simple reports, digital technologies</b></li> </ul>
5 and up	<ul style="list-style-type: none"> <li>• sustained curiosity</li> <li>• observations in unfamiliar contexts</li> </ul>	<ul style="list-style-type: none"> <li>• <b>plan investigations</b></li> <li>• decide <b>variables for fair testing</b></li> <li>• <b>data selection</b></li> <li>• <b>risk assessment</b></li> </ul>	<ul style="list-style-type: none"> <li>• use <b>tables, graphs, digital technology</b> to represent <b>relationships in data</b></li> <li>• identify <b>connections</b> in data</li> <li>• <b>consider alternative ideas</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>recognition of sources of error</b></li> <li>• <b>suggest improvements on methods</b></li> <li>• <b>identify assumptions in secondary sources</b></li> <li>• identify <b>social and ethical implications</b></li> </ul>		<ul style="list-style-type: none"> <li>• reflect on <b>others’ experiences of place</b></li> </ul>
7	<ul style="list-style-type: none"> <li>• sustained intellectual curiosity,</li> <li>• observations to identify questions</li> <li>• <b>hypothesize</b> simple “If...then...”</li> </ul>	<ul style="list-style-type: none"> <li>• <b>collaboratively plan investigations</b></li> <li>• measure and control variables (in/dependent)</li> <li>• <b>accurately measure and record</b> data</li> </ul>	<ul style="list-style-type: none"> <li>• <b>other ways of knowing and local knowledge</b></li> <li>• construct <b>keys, scale models</b></li> <li>• recognize <b>connections between own and secondary source data</b></li> <li>• <b>identify relationships and draw conclusions</b></li> </ul>	<ul style="list-style-type: none"> <li>• assess <b>adequacy of controls and data quality</b></li> <li>• <b>suggest improvements</b> on methods</li> <li>• <b>awareness of assumptions and bias</b></li> <li>• <b>appreciate evidence</b></li> <li>• <b>healthy and informed skepticism</b></li> <li>• <b>evaluate claims</b> in secondary sources</li> </ul>		<ul style="list-style-type: none"> <li>• use <b>scientific language</b> and representations</li> <li>• <b>variety of perspectives and experiences of place</b></li> </ul>

The competencies for each grade include those in preceding grades.