

**The Nature of Science**  
**Measurement Topic: Scientific Knowledge**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Analyzing similar investigations that yield different results to determine the cause of the difference and developing a plan to eliminate the variables (UNIT: Introduction to Science)</li> <li>• Tracing the development of an idea to a scientific theory (UNIT: Introduction to Science)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Scientific theory</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the variables that exist in investigations</li> <li>○ Recognizing or recalling accurate statements about theories and hypotheses</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Scientific Inquiry – The Scientific Method**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<p><b>Student exhibits no major errors or omissions and demonstrates understanding by:</b></p> <ul style="list-style-type: none"> <li>• Proposing questions and hypotheses that can be studied through scientific investigations and distinguishing them from questions and hypotheses that cannot be examined scientifically (UNIT: Introduction to Science)</li> <li>• Explaining why only one variable(<i>e.g., independent, dependent, control</i>) can be manipulated at a time (UNIT: Introduction to Science)</li> <li>• Describing why questioning, response to criticism, replication, accurate record keeping, and open communication are integral to the process of science (UNIT: Introduction to Science)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<p><b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b></p> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Hypothesis</li> <li>○ Independent/dependent variable</li> <li>○ Control</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Identifying examples of questions and hypotheses that can be studied through scientific investigations</li> <li>○ Identifying the variables (<i>e.g., independent, dependent, control</i>) in a scientific investigation</li> <li>○ Recognizing or recalling accurate statements about the role of questioning and defending in the scientific process</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Scientific Inquiry – Data Collection and Analysis**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
<b>3.5</b>	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<p><b>Student exhibits no major errors or omissions and demonstrates understanding by:</b></p> <ul style="list-style-type: none"> <li>• Using appropriate tools, technologies and metric measurements to gather, organize and report results for investigations (UNIT: Introduction to Science)</li> <li>• Describing basic safety procedures in science such as recognizing potential hazards, cautiously manipulating materials and equipment and conducting appropriate procedures (UNIT: Introduction to Science)</li> <li>• Organizing, displaying, and interpreting scientific data from investigations in tables, graphs (e.g. line, circle, bar, histogram) and plots (e.g. stem-and-leaf, box-and-whisker, scatter) (UNIT: Introduction to Science)</li> <li>• Interpreting and evaluating tables, charts, and graphs produced by others (UNIT: Introduction to Science)</li> <li>• Citing evidence from tables, charts, and/or graphs in making arguments and claims in oral and written reports (UNIT: Introduction to Science)</li> </ul>

<b>2.5</b>	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<p><b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b></p> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Stem-and-leaf</li> <li>○ Box-and-whisker</li> <li>○ Scatter</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Recognizing or recalling examples of tools and technologies used in investigations to gather, organize and report scientific results</li> <li>○ Recognizing or recalling accurate statements about safety procedures</li> <li>○ Recognizing or recalling accurate statements about scientific data and interpretation of tables, graphs and plots and the interpretation</li> <li>○ Citing evidence using a teacher provided template</li> </ul> </li> </ul>
<b>1.5</b>	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
<b>0.5</b>	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Scientific Enterprise – Science and Society**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Describing ways in which science and society influence one another (UNIT: Introduction to Science)</li> <li>• Describing the diverse nature of science and scientists past and present (UNIT: Introduction to Science)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Diversity</li> <li>○ Scientific enterprise</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the opposition of science and political issues</li> <li>○ Recognizing or recalling accurate statements about scientists in a grade level curriculum appropriate area</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Common Themes in Science**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<p><b>Student exhibits no major errors or omissions and demonstrates understanding by:</b></p> <ul style="list-style-type: none"> <li>• Analyzing the parts, subsystems and interactions of a system (UNIT: Introduction to Science)</li> <li>• Measuring and graphing change over time and analyzing the results to determine patterns and trends or predict events (UNIT: Introduction to Science)</li> <li>• Comparing and contrasting the properties of objects as they change in scale (UNIT: Introduction to Science)</li> <li>• Constructing physical and conceptual models that mimic the characteristics of an unknown system and comparing the model to the system (UNIT: Models and Design)</li> <li>• Evaluating the usefulness of the model as a comparison tool (UNIT: Models and Design)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<p><b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b></p> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Subsystems</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the parts, subsystems and interactions of a system</li> <li>○ Describing patterns of change based on given graphs</li> <li>○ Recognizing or recalling accurate statements about the properties of objects as they change in scale</li> <li>○ Describing similarities and differences between a given model and the real thing</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Technology**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Evaluating various technologies in terms of drawbacks and benefits to society (Unit: Models and Design)</li> <li>• Explaining how societies influence what types of technology are developed and used in a variety of fields (<i>e.g. agriculture, manufacturing, etc.</i>) (Unit: Models and Design)</li> <li>• Describing the similarities and differences between scientific inquiry and technological design (Unit: Models and Design)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Technological design</li> <li>○ Drawbacks and benefits</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling examples of the benefits and drawbacks of various technologies</li> <li>○ Recognizing or recalling accurate statements about the role of societal needs in determining technological advancement</li> <li>○ Recognizing or recalling accurate statements about the scientific inquiry process and the technological design process</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Nature of Science**  
**Measurement Topic: Engineering**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Developing a product that fulfills a set of requirements using a product development approach (i.e., design, construction of prototype, tests, evaluation of design, and redesign) (UNIT: Models and Design)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Design</li> <li>○ Prototype</li> <li>○ Testing the design</li> <li>○ Evaluation of design</li> <li>○ Redesign</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Using the product development process to plan the development of a product</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Classification**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Evaluating various methods and criteria (phonetic, Phylogenetic) for classifying living organisms (UNIT: Classification)</li> <li>• Comparing and contrasting characteristics of seed and seedless plants (UNIT: Classification)</li> <li>• Describing the distinguishing characteristics of organisms in each kingdom and animals in each phylum (UNIT: Classification)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Kingdom</li> <li>○ Phylum</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Identifying the criteria used to group organisms by kingdom</li> <li>○ Recognizing or recalling accurate statements about the various methods for classifying living organisms</li> <li>○ Recognizing or recalling accurate statements about the characteristics of seedless and seed plants</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Plant and Animal Adaptations**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Analyzing the inherited and learned structures, behavior and physiology of organisms that contribute to survival in their particular environment (UNIT: Species Over Time)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Inherited vs. learned</li> <li>○ Physiology</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the inherited and learned structures, behavior and physiology of organisms that contribute to survival</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Fossils and Extinction**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Describing how fossils provide evidence of the existence, diversification, and extinction of organisms from the past (UNIT: Species Over Time)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Species diversification</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about fossils as evidence of the existence, diversification and extinction of organisms</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Food Chains and Webs**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

4.0	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Analyzing the food webs formed by the interactions of producers, carnivores, herbivores and decomposers in an ecosystem (UNIT: Ecosystems)</li> <li>• Describing the process of photosynthesis (UNIT: Ecosystems)</li> <li>• Describing the flow of energy through an ecosystem (UNIT: Ecosystems)</li> <li>• Describing the cycle of nitrogen, carbon, and phosphorous in an ecosystem (UNIT: Ecosystems)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Photosynthesis</li> <li>○ Nitrogen cycle</li> <li>○ Carbon cycle</li> <li>○ Phosphorus cycle</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about food webs</li> <li>○ Recognizing or recalling accurate statements about photosynthesis</li> <li>○ Recognizing or recalling accurate statements about the flow of energy in an ecosystem</li> <li>○ Recognizing or recalling accurate statements about the nitrogen, carbon and phosphorus cycles in an ecosystem</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Ecosystems**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

4.0	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<p><b>Student exhibits no major errors or omissions and demonstrates understanding by:</b></p> <ul style="list-style-type: none"> <li>• Analyzing and describing the relationships among biotic and abiotic factors and their effects on populations of terrestrial and aquatic ecosystems (UNIT: Ecosystems)</li> <li>• Analyzing natural changes and human-caused changes in an ecosystem to evaluate, with evidential support, whether they are detrimental or beneficial to the survival of populations in that ecosystem (UNIT: Ecosystems)</li> <li>• Analyzing the ecological succession of a variety of environments (UNIT: Ecosystems)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<p><b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b></p> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Population</li> <li>○ Symbiotic relationship</li> <li>○ Predator/prey relationship</li> <li>○ Biotic/abiotic</li> <li>○ Ecological succession</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Providing examples of an organism, species, population, habitat, community, and ecosystem</li> <li>○ Recognizing or recalling accurate statements about the effects of biotic and abiotic factors on populations</li> <li>○ Differentiating between the types of relationships of organisms in an ecosystem (symbiotic, predator/prey)</li> <li>○ Recognizing or recalling accurate statements about the ecological succession of a variety of environments</li> <li>○ Determining if provided examples are a detriment or benefit to the survival of populations in an ecosystem</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Genetics and Heredity**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<p><b>Student exhibits no major errors or omissions and demonstrates understanding by:</b></p> <ul style="list-style-type: none"> <li>• Describing the relationship between genes, proteins, chromosomes, genomes, and DNA and explaining their role in the process of heredity (UNIT: Heredity)</li> <li>• Comparing how genetic material is transferred to offspring in sexual and asexual reproduction (UNIT: Heredity)</li> <li>• Using models such as Punnett squares or pedigree charts to determine the probability of dominant, recessive and incomplete traits being expressed (UNIT: Heredity)</li> <li>• Analyzing the process of natural selection and evaluating evidence of it as a mechanism that leads to diversity of species over time (UNIT: Species Over Time)</li> <li>• Explaining the impact of both sexual and asexual reproduction on the spread of traits that are detrimental or beneficial for the survival of an organism (UNIT: Species Over Time)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<p><b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b></p> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Genes</li> <li>○ Chromosomes</li> <li>○ Dominant/recessive/incomplete dominance</li> <li>○ Natural selection</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the transfer of genetic material (in sexual and asexual reproduction)</li> <li>○ Recognizing or recalling accurate statements about the results of a Punnet square or pedigree chart analysis</li> <li>○ Recognizing or recalling accurate statements about the process of natural selection and the evidence for it</li> <li>○ Recognizing or recalling accurate statements about the impact of sexual and asexual reproduction on the spread of traits</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Cell Theory**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Sequencing the major points in the development of the cell theory, including important historical figures and technological advancements associated with the theory (UNIT: Cells)</li> <li>• Explaining the three components of the cell theory (UNIT: Cells)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Cell theory</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the development of cell theory</li> <li>○ Recognizing or recalling accurate statements about the three components of cell theory</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Cell Structure and Function**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Describing the basic functions of cell organelles in plant and animal cells (UNIT: Cells)</li> <li>• Describing how materials move into and out of cells in the processes of osmosis, diffusion, and active transport (UNIT: Cells)</li> <li>• Explaining how cellular respiration provides cells with energy (UNIT: Cells)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:             <ul style="list-style-type: none"> <li>○ Cell organelles</li> <li>○ Osmosis</li> <li>○ Diffusion</li> </ul> </li> <li>• Performing basic processes, such as:             <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the basic functions of cell organelles</li> <li>○ Recognizing or recalling accurate statements about how materials move in and out of a cell</li> <li>○ Recognizing or recalling accurate statements about cellular respiration</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Animal Body Structures and Functions**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Describing the interaction between each of the human body systems, including homeostasis and the mechanisms that maintain the balance of body systems (UNIT: Body Systems)</li> <li>• Comparing the body systems of various animals and explaining how differences relate to the needs of the animals in their habitats (UNIT: Body Systems)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Homeostasis</li> <li>○ Organs</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the structure, function and interaction of human body systems</li> <li>○ Recognizing or recalling accurate statements about homeostasis</li> <li>○ Recognizing or recalling accurate statements about the body systems of various animals</li> <li>○ Recognizing or recalling accurate statements about how body systems relate to the needs of animals in their habitat</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements

**The Living Environment**  
**Measurement Topic: Germ Theory**  
 Grade Seven

**Evidence shows student has met or exceeded the learning target**

**Evidence shows misunderstanding, misconceptions, or omissions**

<b>4.0</b>	<b>In addition to score 3.0, in-depth inferences and applications that go beyond what was taught</b>
3.5	In addition to score 3.0, in-depth inferences and applications with partial success
<b>Score 3.0</b>	<b>Student exhibits no major errors or omissions and demonstrates understanding by:</b> <ul style="list-style-type: none"> <li>• Describing the development of the germ theory, including key figures in the development and early theories on the cause of illness (UNIT: Germ Theory)</li> <li>• Describing the effect of germ theory on current medical practices (UNIT: Germ Theory)</li> <li>• Describing the effects (including positive) that viruses, bacteria, fungi and parasites have on normal body functions (UNIT: Germ Theory)</li> </ul>

2.5	No major errors or omissions regarding score 2.0 elements with partial knowledge of score 3.0 elements
<b>Score 2.0</b>	<b>Student exhibits major errors or omissions with score 3.0 elements. No major omissions regarding the simpler details and processes such as:</b> <ul style="list-style-type: none"> <li>• Recognizing or recalling specific terminology such as:           <ul style="list-style-type: none"> <li>○ Viruses</li> <li>○ Bacteria</li> <li>○ Germ theory</li> </ul> </li> <li>• Performing basic processes, such as:           <ul style="list-style-type: none"> <li>○ Recognizing or recalling accurate statements about the development of the germ theory</li> <li>○ Recognizing or recalling accurate statements about the effect of germ theory on current medical practices</li> <li>○ Recognizing or recalling accurate statements about the effects of viruses, bacteria, fungi and parasites</li> </ul> </li> </ul>
1.5	Partial knowledge of score 2.0 elements Major errors or omissions regarding score 3.0 elements
<b>1.0</b>	<b>With assistance, student demonstrates partial understanding of some of score 2.0 elements and some of score 3.0 elements</b>
0.5	With assistance, a partial understanding of some of score 2.0 elements but not score 3.0 elements