

2. Nature of Scientific Theories					
A. Scientific theories are subject to on-going testing and revision.	SD	D	U	A	SA
B. Scientific theories may be completely replaced by new theories in light of new evidence.	SD	D	U	A	SA
C. Scientific theories may be changed because scientists reinterpret existing observations.	SD	D	U	A	SA
D. Scientific theories based on accurate experimentation will not be changed.	SD	D	U	A	SA
With examples, explain why you think scientific theories change OR do not change over time.					

3. Scientific Laws vs. Theories					
A. Scientific theories exist in the natural world and are uncovered through scientific investigations.	SD	D	U	A	SA
B. Unlike theories, scientific laws are not subject to change.	SD	D	U	A	SA
C. Scientific laws are theories that have been proven.	SD	D	U	A	SA
D. Scientific theories explain scientific laws.	SD	D	U	A	SA
With examples, explain the difference between scientific theories and scientific laws.					

4. Social and Cultural Influence on Science					
A. Scientific research is not influenced by society and culture because scientists are trained to conduct “pure”, unbiased studies.	SD	D	U	A	SA
B. Cultural values and expectations determine <u>what</u> science is conducted and accepted.	SD	D	U	A	SA
C. Cultural values and expectations determine <u>how</u> science is conducted and accepted.	SD	D	U	A	SA
D. All cultures conduct scientific research the same way because science is universal and independent of society and culture.	SD	D	U	A	SA
With examples, explain how society and culture affect OR do not affect scientific research.					

5. Imagination and Creativity in Scientific Investigations					
A. Scientists use their imagination and creativity when they collect data.	SD	D	U	A	SA
B. Scientists use their imagination and creativity when they analyze and interpret data.	SD	D	U	A	SA
C. Scientists do not use their imagination and creativity because these conflict with their logical reasoning.	SD	D	U	A	SA
D. Scientists do not use their imagination and creativity because these can interfere with objectivity.	SD	D	U	A	SA
With examples, explain why scientists use OR do not use imagination and creativity.					

6. Scientific Investigation					
A. Scientists use a variety of methods to produce fruitful results.	SD	D	U	A	SA
B. Scientists follow the same step-by-step scientific method.	SD	D	U	A	SA
C. When scientists use the scientific method correctly, their results are true and accurate.	SD	D	U	A	SA
D. Experiments are not the only means used in the development of scientific knowledge.	SD	D	U	A	SA
<p>With examples, explain whether scientists follow a single, universal scientific method OR use different methods.</p>					

