## Content Knowledge: "What you know"

| Achievement <br> Level | Level Descriptor |
| :---: | :--- |
| $\mathbf{0}$ | The student does not reach a standard described by any of the descriptors <br> below. |
| $\mathbf{1}$ | The student recalls some scientific ideas, concepts or processes. The <br> student can apply scientific understanding to solve simple problems. |
| $\mathbf{2}$ | The student recalls most scientific ideas, concepts or processes. The <br> student applies scientific understanding to solve most simple problems. <br> Evidence of level 3 or 4 descriptors are so few and inconsistent that the <br> achievement level of 2 remains justified. |
| $\mathbf{3}$ | The student describes scientific ideas, concepts or processes. The <br> student applies scientific understanding to solve complex problems in <br> familiar situations. The student analyses scientific information by <br> identifying parts, relationships or causes. The student shows some <br> evidence of using scientific information in a useful way. |
| $\mathbf{4}$ | The student uses scientific ideas, concepts and processes in a useful way <br> or to construct explanations. The student applies scientific understanding <br> to solve complex problems in unfamiliar situations. The student <br> analyses and evaluates scientific information and makes judgements <br> supported by scientific understandings. |

## Content Knowledge: "What you know"

| Achievement <br> Level | Exam Score |
| :---: | :--- |
| $\mathbf{0}$ | 0-20\%, Random guessing might statistically explain up to twenty <br> percent on a multiple choice exam with five answer choices. As a <br> result I have no confidence or a lack evidence of any learned <br> knowledge. |
| $\mathbf{1}$ | 21-40\%, Sixty percent of the exam consists of low order questions, <br> factual recall and simple problems. A score in this range can not be <br> explained by guessing alone, the student demonstrates a knowledge <br> of some scientific information. |
| $\mathbf{2}$ | 41-60\%, A student who scores in this range demonstrates a <br> knowledge of most of the low order questions, factual recall and <br> simple problems scientific information. Although the student may <br> have answered some higher ordered questions, it is unlikely that the <br> bulk of their knowledge/score comes from level 3 and 4 questions. |
| $\mathbf{3}$ | 61-80\%, Twenty percent of the exam consists of questions that <br> require level skills to answer them correctly. A student who scores in <br> this range demonstrates the ability the use at least some scientific <br> knowledge in meaningful ways. Obviously the closer the score is to <br> 80\% the higher the degree of confidence. |
| $\mathbf{4}$ | 81-100\% Twenty percent of the exam consists of challenging higher <br> order questions, a student who scores in this range demonstrates the <br> ability the use scientific knowledge in meaningful ways. These <br> students show the ability to solve complex problems, some of which <br> may have be unfamiliar to them. |

