

Responding to Constructed-Response Questions on the Keystone Exam

Rubric for Writing Prompts

3 POINTS

- The response demonstrates a ***thorough*** understanding of the scientific content, concepts, and/or procedures required by the task(s).
- The response provides a clear, complete, and correct response as required by the task(s). The response may contain a minor blemish or omission in work or explanation that does not detract from demonstrating a ***thorough*** understanding.

2 POINTS

- The response demonstrates a ***partial*** understanding of the scientific content, concepts, and/or procedures required by the task(s).
- The response is somewhat correct with ***partial*** understanding of the required scientific content, concepts, and/or procedures demonstrated and/or explained. The response may contain some work that is incomplete or unclear.

1 POINT

- The response demonstrates a ***minimal*** understanding of the scientific content, concepts, and/or procedures required by the task(s).
- The response is somewhat correct with ***minimal*** understanding of the required scientific content, concepts, and/or procedures demonstrated and/or explained. The response may contain some work that is incomplete or unclear.

0 POINTS

- The response provides ***insufficient*** evidence to demonstrate any understanding of the scientific content, concepts, and/or procedures required by the task(s).
- The response may show only information copied or rephrased from the question or ***insufficient*** correct information to receive a score of 1.

Note: No deductions should be taken for misspelled words or grammatical errors.

Examples to help you Practice

1. Proteins are a major part of every living cell and have many different functions within each cell. Carbohydrates also perform numerous roles in living things.

Part A: Describe the general composition of a protein molecule.

Score: 3

Proteins are made of carbon, hydrogen, oxygen, nitrogen and some have sulfur. These elements form amino acids. Amino acids form proteins.

Score 2:

Proteins are made of amino acids and have carbon, hydrogen, oxygen and nitrogen.

Score 1:

Proteins have 4 elements in them: C, H, O, and N and are made of building blocks called amino acids.

Score 0:

Proteins are big molecules.

Part B: Describe how the structures of proteins differ from the structures of carbohydrates.

Score 3:

Carbohydrates are in long chains formed by sugars that are bonded together. Proteins can be in sheets or folded shapes. Carbohydrates only have carbon, hydrogen and oxygen in them.

Score 2:

Proteins have a lot of shapes like sheets or bundles that fold back on themselves. Carbohydrates are chains of carbon, hydrogen and oxygen.

Score 1:

Proteins are made of amino acids, carbohydrates are not.

Score 0:

There are more parts to a carbohydrate than a protein because carbohydrates are bigger than proteins.

Part C: Describe how the functions of proteins differ from the functions of carbohydrates.

Score: 3

Proteins make up the enzymes that speed up the reactions in living things. Proteins also make antibodies. Carbohydrates give us energy (starch) and make plant cell walls (cellulose).

Score 2:

Both things are needed for life.

Score 1:

More foods have Carbohydrate than protein. Meat has protein.

Score 0:

Proteins help you grow but carbohydrates make you fat