Claim – Evidence – Reasoning

Use your knowledge of claim, evidence and reasoning to answer the following question:

Is a millipede an insect?

Claim: No a millipede is not a insect.

Evidence: a millipede has 100 legs

Reasoning: All insect have 6 legs

Now rewrite your thinking into a paragraph:

No a millipede is not is an insect a millipede has many legs and all insect have 6 legs therefore a millipede is not a insect.
Claim – Evidence – Reasoning

Use your knowledge of claim, evidence and reasoning to answer the following question:

Is a millipede an insect?

Claim: No, a millipede is not an insect.

Evidence: Well because it has lots and lots of legs, more than an insect.

Reasoning: It's because it has lots and lots of body parts just like the legs, insects have three body parts.

Now rewrite your thinking into a paragraph:

No, a millipede is not an insect. The evidence is well it has lots and lots of legs, more than an insect. My reason is it has lots and lots of body parts just like the legs, insects have three body parts.
Does the weight of the washers change the speed of the vehicle?

Yes, it changes the speed of the vehicle. It changes the speed of the vehicle. I ask then why when you add washers to our vehicle, it moves faster and farther? Which is why I say yes, the weight of the washers in change the speed of the vehicle.

First, I attached 2 washers on a paperclip, attached to string and connected on our vehicle. Washers only made it move slowly then stop. Then I put 4 washers on the paperclip, and my vehicle moved a bit farther and faster. Then with 2 washers that I put 8 washers on the paperclip, our vehicle moved a lot faster and farther and did slowly last, but certainly not least, then I put 16 washers on the paperclip, our vehicle went really fast, flew off the table and good when it hit a chair. That's why I think the weight of the washers can change the speed of the vehicle.

The reason the weight of the washers change the speed of the vehicle is because of force. Newton's law states an object at rest stays at rest, and an object in motion unless pushed or pulled, or forced into a different direction. And our vehicle, was like an act of force. With the more weight, in more force was being added, which is why I think the weight of the washers change the speed.
The weight of the object changes the vehicle. The weight of the object changes the speed of the vehicle. When you first put the object on the clip, it did not move. We put more weight on and then the vehicle started to move. Then we put 2 weights on the clip and it moved fast. Then we made it move faster by putting 1 more weight on the vehicle. It moved whole weight, then I started to see that the force is pushing the vehicle to make it move the more harder the force push the more faster it goes.
Exam 2 – Pop and Eco

Which type of food contains the most energy?
   a. Popcorn
   b. Cheetos
   c. Bread
   d. They all contain the same amount of energy

22) What is your claim?
   The cheeto contains the most energy.

23) What evidence do you have to support your claim above? Provide at least 3 pieces of evidence.

   The cheeto contains the most energy because it made the largest change in temperature. Also, the flame lasted longer than the other foods. Another piece of evidence that the cheeto has more energy is that the cheeto had a larger flame than the other foods.

24) What reasoning do you have that explains how your evidence backs up your claim?

   I know that the cheeto had the most energy because it takes about one calorie to change the temperature in a 1 ml volume of water up 1°. In the experiment, we used 10 ml volume of water and the temp went up 16° from its starting point. This shows it had 160 calories in the cheeto, where as the bread changed 4° (40 cal.) and the popcorn changed 10° (100 cal.). That is why the cheeto had more energy.
Exam 2 – Pop and Eco

Which type of food contains the most energy?
   a. Popcorn
   b. Cheetos
   c. Bread
   d. They all contain the same amount of energy

22) What is your claim?
   The Cheetos has the most energy.

23) What evidence do you have to support your claim above? Provide at least 3 pieces of evidence.
   One way you could tell which has the most energy is by the temp changes.
   The popcorn started off with 20 and ended with 30.
   The bread started with 20 and ended with 30.
   The Cheetos started with 20 and ended with 30.

24) What reasoning do you have that explains how your evidence backs up your claim?
   My evidence backs up my claim because you could see that the
   All started off with the same temp. 20 but Cheetos is the temp
   that changed the most.
Biology Common Writing Assignment – Draft 1

Directions: Read the following prompt. Then construct a scientific explanation—following the framework we have been using all year—that answers the question. Make sure you preview the rubric so you know the qualities on which you are being assessed. This is your first draft, but you should do the best you can. You will go through an editing process to create a second draft.

Prompt: Three of your friends at ACC are arguing about the best diet in order to maintain fitness-for-life. After sitting through biology class, they ask you for a scientific explanation of which meal is better. View the nutritional content of their sample meals below, and choose which diet you think is best for overall fitness. All diets are for a 125-150 pound person.

<table>
<thead>
<tr>
<th></th>
<th>Carbohydrate</th>
<th>Lipid</th>
<th>Protein</th>
<th>Vitamin B6</th>
<th>Vitamin C</th>
<th>Iron</th>
<th>Calcium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>300g</td>
<td>5g</td>
<td>15g</td>
<td>2mg</td>
<td>100mg</td>
<td>15mg</td>
<td>1050mg</td>
</tr>
<tr>
<td>Student B</td>
<td>200g</td>
<td>30g</td>
<td>65g</td>
<td>2mg</td>
<td>60mg</td>
<td>18mg</td>
<td>1000mg</td>
</tr>
<tr>
<td>Student C</td>
<td>50g</td>
<td>100g</td>
<td>150g</td>
<td>2mg</td>
<td>10mg</td>
<td>5mg</td>
<td>750mg</td>
</tr>
</tbody>
</table>

Question: Which of these diets is the best diet for fitness-for-life? Use your understanding of biology to explain why you chose that diet.

Claim: Write a statement that answers the question above.

_Student B's diet is best for overall fitness._

Evidence: State the evidence that supports your claim.

_I think Student B because carbohydrates are used to store the energy that comes from lipids, you need vitamin C to control the iron absorption, proteins and vitamin B6 both work together to limit the amount of meat, poultry etc? That's why I think Student B's diet is best choice for overall fitness, because the nutrients aren't too much or too little. Compare actual diets here._

Address reasons why the nutrients are important in reasoning.
In order for your body to maintain homeostasis, your body needs to have a certain amount of food, nutrients, to function properly. Fats are good for making hormones, cell membranes, and storing energy. Too many of the "wrong" fats, lipids, can damage your health so you shouldn't consume more than 30% of your diet as fat. Carbohydrates are important to the body because they fuel the body; so it can function properly. Your body needs a relatively high amount of carbohydrates for "bulk foods" so your body has energy. Carbohydrates let off amino acids, which provide the body with protein. The body cannot make all the amino acids it needs in order to be healthy, so it gets the rest from milk, calcium, eggs, etc. By also eating nuts, beans, etc, it also contributes to a healthy amount of proteins in the body. You need a lot of calcium to make up the proper amount of proteins. Humans only need a small amount of vitamins in order to function properly with the help of enzymes. For internal balance the amount of nutrients also has to be balanced so it can regulate the body foods you eat & make what you need. Because someone might believe you need a lot more carbohydrates than anything else because it helps with your energy level. But having that many carbs in a diet isn't healthy because then your lacking in proteins because your body doesn't have enough EAT to help it make proteins, and too much vitamin C which helps you make the proteins the body can't get from amino acids. The amount of some things is too high, where as other important elements are lacking.
Biology Common Writing Assignment – Draft 1

Directions: Read the following prompt. Then construct a scientific explanation—following the framework we have been using all year—that answers the question. Make sure you preview the rubric so you know the qualities on which you are being assessed. This is your first draft, but you should do the best you can. You will go through an editing process to create a second draft.

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<th>Vitamin B₆</th>
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<th>Iron</th>
<th>Calcium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student A</td>
<td>300g</td>
<td>L</td>
<td>L</td>
<td>H</td>
<td>H</td>
<td>m</td>
<td>b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5g</td>
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<td>H</td>
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<td>m</td>
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Question: Which of these diets is the best diet for fitness-for-life? Use your understanding of biology to explain why you chose that diet.

Claim: Write a statement that answers the question above.

The best diet for these students would be Student A's diet.

Evidence: State the evidence that supports your claim.

The reason why I chose Student A is because her/his diet is composed of higher mg of vitamin C, iron, and calcium from other diets which is a good thing in most cases. Such as the Vitamin C. Student A has 100mg. The other two students had 60mg and 10mg. There also was the lipid which is fat. Student A had only 5g for lipid, while the other students had 30g and 30g. So Student A would be getting the least fat out of all.
Calcium (1050mg), which is very good for your bones, and although Student A wasn't high in protein, it averaged out to have a medium amount of iron.

Reasoning: Justify your claim based on the evidence.

The reason these nutritious contents for Student A were good on the levels they are now is because for carbohydrates, they provide fuel a body can use most readily, so Student A has the highest in that. Student A also has the lowest lipid. Lipid is a fat in the body. Too much could be a bad thing. Other students have evidence as much as 10% for lipid, but Student A only has 5%. For protein, Student A does lack protein (5g), but has a good dose of Vitamin C. Vitamin C is essential to formation of collagen, and intercellular substance that holds cells together, protects against infection, maintains strength in blood vessels, etc. Student A also has a medium amount of iron. But Student A has a pretty amount of calcium. Calcium helps bones and teeth only.

Rebuttal: Address an argument that someone who disagrees with you might make.

Some people might say Student B is a better choice than Student A because Student B has a fair amount of every while Student A shouldn't be so high in all areas. But Student A's food guide is more better for the body, so the reason that you followed this food guide, why?

Meaning of this sentence is unclear.