



Name: _____

Period: _____

SSB Treasure Hunt

What do you REALLY get in the end?

Beverage Choice	Beverage Nutrients (# of calories/grams of sugar)	Activity Choice	Calories burned per hour for your activity	Caloric excess/deficit	Type of Sugar

Source of exercise information: _____

Complete the table below while you are researching the type of sugar found in your SSB.

Scientific name for sugar made of	Example of	Naturally found in what food?
One ring		
Two rings		

Question 1: Answer prior to doing any research.

How do you think the food you ingest is converted into usable chemical energy? Provide as much detail as you can.

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Complete the following table while you are researching how food energy is converted into chemical energy.

Process that converts sugar into chemical energy			
Name the 3 major parts of the process identified above			
Sugar used in above process (? 1 on diagram)			
What part of the cell is Letter A representing on the diagram?			
Organelle represented by letter B?			
The energetic component produced by B (? 2)			

Chemical Equation for cellular respiration:

Write 5 sentences that describe the process of converting glucose into ATP that utilizes terms identified in the chart above.

Three questions you have about energy intake and conversion.

- 1.
- 2.
- 3.

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Our bodies have the ability to take in energy sources and store them for long periods of time. Discuss why this is an advantage for humans and how it might have evolved over time.

It had been a tough week so on Saturday morning I visited my favorite coffee establishment and decided to treat myself to a fancy coffee beverage to reduce the stress I had been feeling. I chose to have a Venti Peppermint Mocha Twist Frappuccino (Starbucks) to kick start what promised to be a better day. I now wonder whether the 45 minutes I spent on the elliptical machine will help me burn off those extra calories I consumed. I have not had a moment to research my concern please help me find information on my indulgent beverage and determine whether I have made a grave mistake. Did I reward myself too much? Can you suggest a better option?

Excess energy consumed is stored as (A)_____ or (B)_____.

	Molecule A	Molecule B
Where is it stored?		
Type of macromolecule?		

How many calories are in a pound of fat? _____

Examine the caloric excess/deficit for your beverage and activity choice. If you consumed more calories than your exercise burned and you assume that all of those calories will be converted to fat. How many days would it take for you to gain or lose 1 pound of fat (assuming you drink one of your beverages every single day)? On the other hand, if you consumed fewer calories than you burned how many days would it take for you to lose 1 pound of fat? Show your math.

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