Station 4

Match the nutrition information or recipe to the following possible items:

2% Milk	
Artificial Sweetener	
Baking Chocolate	
Baking Powder	
Baking Soda	
Brioche Recipe	
Butter	
Buttermilk	
Cake Flour	
Challah (Egg Bread) Recipe	
Chocolate Chips	
Coconut Milk	
Cookie Recipe	
Croissant Recipe	
Cupcake Recipe	
Custard Recipe	
Egg Beaters	
Margarine	
Vanilla Extract	
White All Purpose Flour	
White Bread Recipe	

Match the cupcake to its missing ingredient

Baking Soda	
Eggs	
Flour	
Butter	
Sugar	

Using the available equipment, calculate the density of the following ingredients.

Sugar	
Brown Sugar	

#### White Powder ID

Using the information and what you can observe without opening the cups, match the letter to the substance on your answer sheet. If you could do a test to the substance that would make your answer definitive, list it. (For instance if an ingredient should test positive for reducing sugar, then name the test for reducing sugar.)

Viscosity Time!

The cups each contain 25 ml of the unknown liquid. Please use the waste containers to catch the flow. Clean up the area afterwards

Pop Quiz!

Answer as many of these as you can in the 4 minutes allotted.

#### Pop Quiz

- 1) Which of the following is not an approved ingredient?
  - a) corn oil
  - b) corn flour
  - c) corn syrup
  - d) none of these
- 2) Which of the following is not considered a lipid
  - a) shortening
  - b) chocolate
  - c) eggs
  - d) butter
- 3) In what product would you find fructose?
  - a) baking soda
  - b) milk
  - c) margarine
  - d) honey
- 4) Which of the following <u>cannot</u> be substituted for a similar amount of white sugar in baked goods
  - a) brown sugar
  - b) aspartame
  - c) sucrose
  - d) none of these
- 5) How is skim milk different from whole milk?
  - a) It has less protein
  - b) It has less vitamin D
  - c) It has less vitamin C
  - d) It has less fat
- 6) One day I was short ½ of a cup of flour while baking a cake. I decided that such a small amount wouldn't make any difference, so I proceeded to add the rest of the ingredients and baked it as usual. What happened to my cake?
  - a) It was just fine
  - b) It burned
  - c) It never tested done
  - d) It was dry and crumbly
- 7) Brown sugar is really just white sugar coated with molasses
  - a) True
  - b) False
  - c) Only if you are buying it in Hawaii
  - d) Only if you are buying generic brown sugar

- 8) What is the formula for density?
  - a) Density=Mass / Volume
  - b) Density=Weight / Volume
  - c) Density= Volume / Mass
  - d) Density is a measured unit, not a derived unit so there is no formula
- 9) How many Calories (note that capital C) are in 1 gram of fat
  - a) 9
  - b) 4
  - c) 9000
  - d) 4000

### Use the following for questions 10-15

Consider the following recipe for custard:

- 2 cups whole milk
- 2 eggs
- 1/16 teaspoon salt
- 2 Tablespoons sugar
- 10) Which of the ingredients adds the most calories to the whole recipe?
  - a) 2 cups whole milk 300 calories
  - b) 2 eggs
  - c) 1/16 teaspoon salt
  - d) 2 Tablespoons sugar
- 11) Which of the ingredients adds the most sodium to the whole recipe?
  - a) 2 cups whole milk 250 mg
  - b) 2 eggs
  - c) 1/16 teaspoon salt 150 mg
  - d) 2 Tablespoons sugar
- 12) Which of the ingredients adds the most sugars to the whole recipe?
  - a) 2 cups whole milk 22 g
  - b) 2 eggs
  - c) 1/16 teaspoon salt
  - d) 2 Tablespoons sugar 25g
- 13) Which of the ingredients adds the most protein to the whole recipe?
  - a) 2 cups whole milk 16g
  - b) 2 eggs 12.6g
  - c) 1/8 teaspoon salt
  - d) 2 Tablespoons sugar
- 14) Which of the ingredients would be listed first on a nutrition label?
  - a) 2 cups whole milk (largest by mass)
  - b) 2 eggs
  - c) 1/8 teaspoon salt
  - d) 2 Tablespoons sugar

- 15) Which of the ingredients adds the most lipids (fat)?

  a) 2 cups whole milk 16g

  b) 2 eggs 9.6g

  c) 1/8 teaspoon salt

  d) 2 Tablespoons sugar
- 16) Why do high altitude instructions often call for the addition of more water?
  - a) because high altitude air is colder
  - b) because water boils at a lower temperature at high altitude
  - c) because high altitude air has higher relative humidity
  - d) because it makes the recipe cook faster
- 17) The unit of viscosity you used to make your calibration curve is
  - a) Centipedes
  - b) Centigrams
  - c) Centigrams per second
  - d) Centepoise
- 18) At tempertures above about 310 (ish) what reaction causes the crust of bread to brown?
  - a) maillard
  - b) melanoidin
  - c) malodorous
  - d) milady
- 19) Colligative properties allow for which of the following
  - a) sugar crystallizing
  - b) pure water boiling
  - c) candy making
  - d) bread rising
- 20) Which of the following contains no sugars or starches
  - a) molasses
  - b) whole wheat flour
  - c) coconut milk
  - d) vegetable oil
- 21) Which of the following has the least cholesterol
  - a) Coconut milk
  - b) 2% milk
  - c) 1% milk
  - d) Whole milk
- 22) How is margarine different from butter?
  - a) margarine has much less fat
  - b) butter has much less protein
  - c) margarine has more trans fatty acids (trans fats)
  - d) butter melts at a much higher temperature

b)	Iodine
c)	Brown Bag
<b>d</b> )	Benedicts solution
24) Whi	ch would react with Benedict's solution?
a)	starch
<b>b</b> )	sucrose
c)	glucose
d)	aspartame
25) Wha	t is a reducing sugar?
a)	a sugar that helps you lose weight
<b>b</b> )	a sugar that reduces the effects of diabetes
c)	a sugar that is capable of reducing in a redox reaction
d)	a sugar that reduces your need for protein
26) Whic	ch of the following could be used to help determine the calories in a baked
_	the cookbook where you found the recipe
	a bomb calorimeter
,	nutrition charts
,	all of the above
27) Wha	t is sucralose?
a)	a reducing sugar
	a sugar substitute often called Splenda
c)	a byproduct of sugar production
d)	the most easily digested sugar
28) Whic	ch of the following is not commonly found on a nutrition facts label?
a)	Calcium
<b>b</b> )	Sodium
,	Vitamin C
d)	) Caffeine
29) If yo	u are lacose intolerant, which of these should you avoid?

23) Which of these is used to test for the presence of starch?

a) Biuret's solution

a) soy milkb) coconut milkc) goat milkd) all of the above