Twinkie, Deconstructed

Worksheet Two

Chapter Four: "Enrichment Blend..."

1. It was stated that enriching of wheat flour is done to add needed vitamins, which were lacking in the mid-20th century diet. Some of these vitamins were bleached out of the flour and some of them do not naturally occur in wheat flour. Complete the following table for three Vitamins in the "Blend."

Vitamin Name	Chemical Name	How is it produced?	What whole food (Non- processed) item provides this nutrient?

2. Take a stab at writing out the chemical reactions, in the form of balanced equations, for this statement: "Reduced iron is made from food-quality iron that has been reacted with carbon monoxide and/or hydrogen to get ferric oxide..."

Chapter Five: Sugar

- 3. In a Twinkie, sugar is NOT primarily utilized as a sweetener. What is it used for?
- 4. There are two major sources of sugar in the U.S. List them and compare their processes.
- 5. How many tons of sugar does the U.S. consume per annum? What do you think are the top 3 ways Americans consume sugar?

Chapter Six: Corn Sweeteners

- 6. Eight of Twinkies' 39 ingredients are made from corn. Name them.
- 7. What is "steep water" used for?