

Project Brainstorming Document

- 1) What might you be interested in experimenting with (cooking/preparing) for the chemistry of food & cooking project? Why?

cooking rice to show why it got soft

- 2) What else might you be interested in experimenting with (cooking/preparing) for the chemistry of food & cooking project? Why?

cooking egg to show how protein change

- 3) What is a third food you might be interested in experimenting with (cooking/preparing) for the chemistry of food & cooking project? Why?

fry pork and how long marinate meat will affect

Pick one of the three options you listed above to complete questions 4-8.

Option: third option

- 4) What are 2-4 aspect(s) of the recipe (ingredients, cooking method etc.) could you manipulate? The aspect or aspects of the recipe you manipulate are the **independent variable** or variables.

I could manipulate the time i marinate the meat with the sauce

- 5) Pick one aspect of the recipe you proposed manipulating from the answer above. How might altering that variable change the final product? List several possible changes in the characteristics of the final product. These changed characteristics are the **dependent variable(s)**.

by altering the time of the marination, I think it will affect how much

flavor of the sauce there will have inside the chicken

- 6) Select one of the dependent variables you listed in answer to question 5. How might you measure the dependent variable? Will these measurements be **quantitative**(measurable with a number and unit) or **qualitative**(observational only)?

My dependent variable is the texture, taste and the color of the meat. the measurement will be qualitative because it can not put a number on the taste and color

- 7) Using chemistry, explain why (guesses are OK!) the **independent variable** you selected in question 4 could affect the **dependent variable** you listed in question 5. *If time allows, do some research on this before typing your response.*

The time of marination could affect the taste, texture and color because I think the more time you let the sauce go into the meat, the sauce particles are going in between the meat particles or the sauce is having a chemical reaction with the meat. I don't know.

- 8) What other aspects of the recipe need to be held constant? *These are considerations for a well-designed experiment.*

the pork, the time to fry

