Scientific Method What is it???

• Series of steps followed by people (not just scientists) to Solve problems.

Steps

- 1) QUESTIDA want to find out about something we are curious about
- 2) Hypothesis form an educated guess about what we think the answer to our question is
- 3) Perform experiments make observations (data)
 4) Analyze data calculations, tables, graphs
- 5) Conclusion Did our data support our hypothesis? Did we answer our question? Should we perform more experiments?

Example of using S.M.

- 1) Problem What ingredients are lacking on the food I just cooked?
 - 2) Hypothesis Salt must be lacking because the food is very sweet.
 - 3) Experiment I added salt in the food and then tasted it again.
 - 4) Analysis I found out that the tastes became balanced and improved.
- 5) Conclusion I concluded that it so sweet so salt must be added to balance the taste.

Pieces and Parts...

- <u>Variable</u> any part of an experiment that can <u>Changed</u> ex: height, surface, mass
- Independent Variable (experimental variable) part of experiment that is manipulated or changed by scientist
- · Dependent Variable—part of the exp. that is affected because of the independent variable
- Controlled Experiment test 1 variable at a time
- Constant part of experiment that stays the Same
- Control part of experiment not being tested