



- I. **Prepare a Survey** to find out what people know about antibiotics OR vaccines
 - A. Ask individuals what they know (or think they know) about the topic. (Make sure you use leading questions and conversation for people who might give one-word answers. Get individuals to give you 2- 5 sentences of explanation about what they know).
 - B. Ask individuals where they learned their information.
 - C. Develop 5 multiple choice or true/false questions (on antibiotics OR vaccines) that will test their actual knowledge of the process. Provide the correct answers to your questions.

- II. **Survey 20 people** (or more) about antibiotics OR vaccines.
 - A. Record the answers of your participants. (it can be handwritten, via email, Social Media polls, transcripts of phone conversations)
 - B. Collect your RAW data for submission

- III. **Report Your Findings**
 - A. After recording and reviewing their answers, organize your data according to 2 different themes of your choosing.
 1. You can compare... high school students vs adults or 5th graders, boys vs girls, pharmacists vs doctors vs lay people, practitioners vs researchers etc
 - B. Develop at least 2(per your chosen theme) tables/charts/diagrams **summarizing** your data, and then at least 2 graphs of the data in the table as a visual representation to present your data/results to the class.
 - C. Answer the following questions based on your active research:
 1. What do most people seem to know correctly about your chosen process?
 2. What do most people seem to know incorrectly about your chosen process?
 - D. Plan/Create an infomercial that specifically addresses what most people seem to know incorrectly about your chosen process
 1. What **kind** of "infomercial" or informative service could you provide/create to better educate the general public about photosynthesis or respiration and their importance in our daily lives. (Billboard? TV commercial? Radio spot? Ad plane? Moving billboard etc)
 2. When, where and for how long will your infomercial air?
 3. Give a color sketch/transcript/outline of your infomercial.

Attach this entire rubric to the FRONT of your folder.

- /10pts Submit original responses of 20 people
- /5 5 multiple choice questions
- /10 Data Report (charts/tables AND graphs including: title, labels, data, caption/narrative description of diagrams)
- /2.5 What do people know correctly?
- /2.5 What do people know incorrectly?
- /5 Infomercial/informative service

Resources for Factual information on Antibiotics	Resources for Factual information on Vaccines
Antimicrobial resistance statistics from WHO:	Constructing a Vaccine
Antibiotics & Vaccine Animations	Malarial Vaccine
How bacteria obtain antibiotic resistance:	TedEd: How Do Vaccines Work
SciShow video on super bugs and recent antibiotic research:	History of Vaccines
Kevin Wu's science education YouTube page	CDC Vaccines

