

FRES 101 — Mythbusting, Skepticism, and Statistics
Homework 3 – Due Wednesday, Feb. 8

Homework Guidelines:

- The written portion of your homework assignment (if there is one) is due at the beginning of class on the due date specified above. **No late homeworks will be accepted.**

Data Collection Assignment:

This week we are going to investigate the myth of “Pyramid Power”. The myth is that pyramids that have the same relative dimensions of Egyptian pyramids act as electronic antennas for a mysterious unseen energy source. They are claimed to have all sorts of extraordinary properties, based on the idea that the pyramid somehow focuses this mysterious energy which then imparts all sort of benefits. For example, knives or razors kept inside pyramids are said to not dull or even get sharper, food kept under a pyramid is said to not spoil, water kept under a pyramid is supposed to have healing properties when consumed, etc. This week we are going to investigate the supposed food preserving property. Your assignment:

Materials: An Apple, a knife, some tape (either Scotch (clear) or masking tape is ok), two plastic zip-loc bags, and a (small) plate (can use a paper, plastic, etc. plate or substitute some other suitable surface).

Do steps 1–4 as soon as possible (today)!

1. In class I will hand out two pieces of cardboard from which you are to assemble a pyramid of the correct relative dimensions. All that is required for the assembly is some folding and taping - I will explain in class.
2. Wash the knife and the apple with soap and water, then cut the apple in half. Wash the knife again and then cut one of the halves in half again so that you have two quarter-apple pieces. Eat the remaining uncut half apple (they’re good for you).
3. At random, choose one quarter-apple slice and place it inside the cardboard pyramid. Place the other apple slice on the plate.
4. Put both the pyramid and plate somewhere out of the way in your kitchen, dorm room — wherever — and leave them sit all week.
5. Next Wednesday morning before class, place each slice of apple in a zip-loc plastic bag. Label each bag with your name, and with the treatment (pyramic or control). Bring your bags of apple slices to class next week.

That’s it. Have fun. Next Wednesday we will rate the freshness of each apple slice and then we’ll analyze the resulting data.