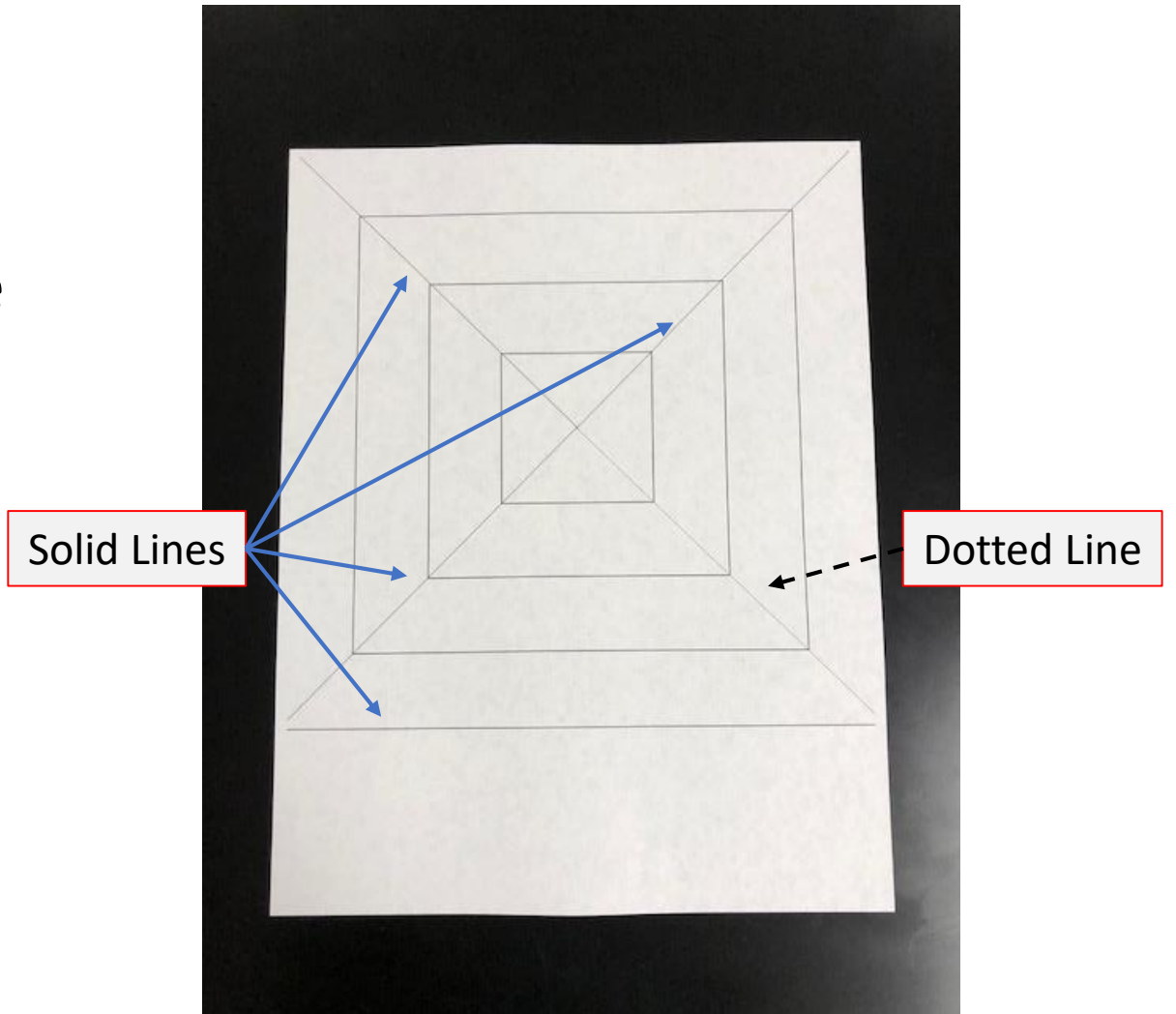


Ecological Pyramids Foldable

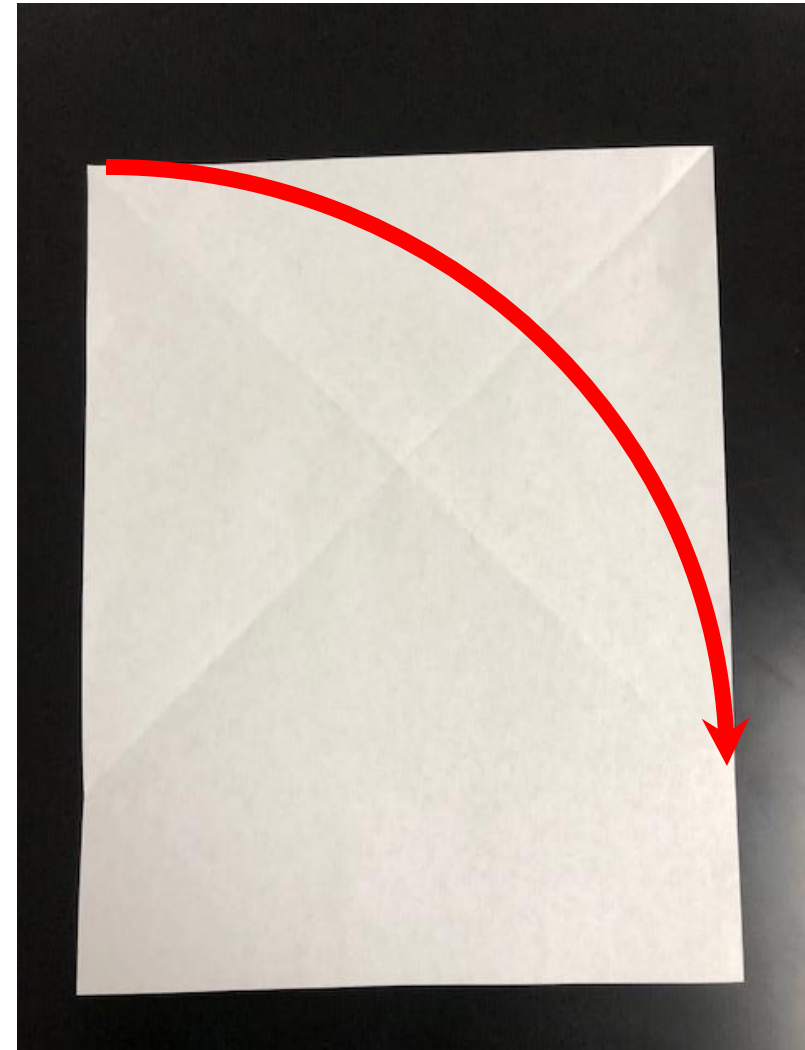
Building your pyramid foldable

- Get a pyramid foldable sheet.
- Notice the difference between the solid lines and dotted line.



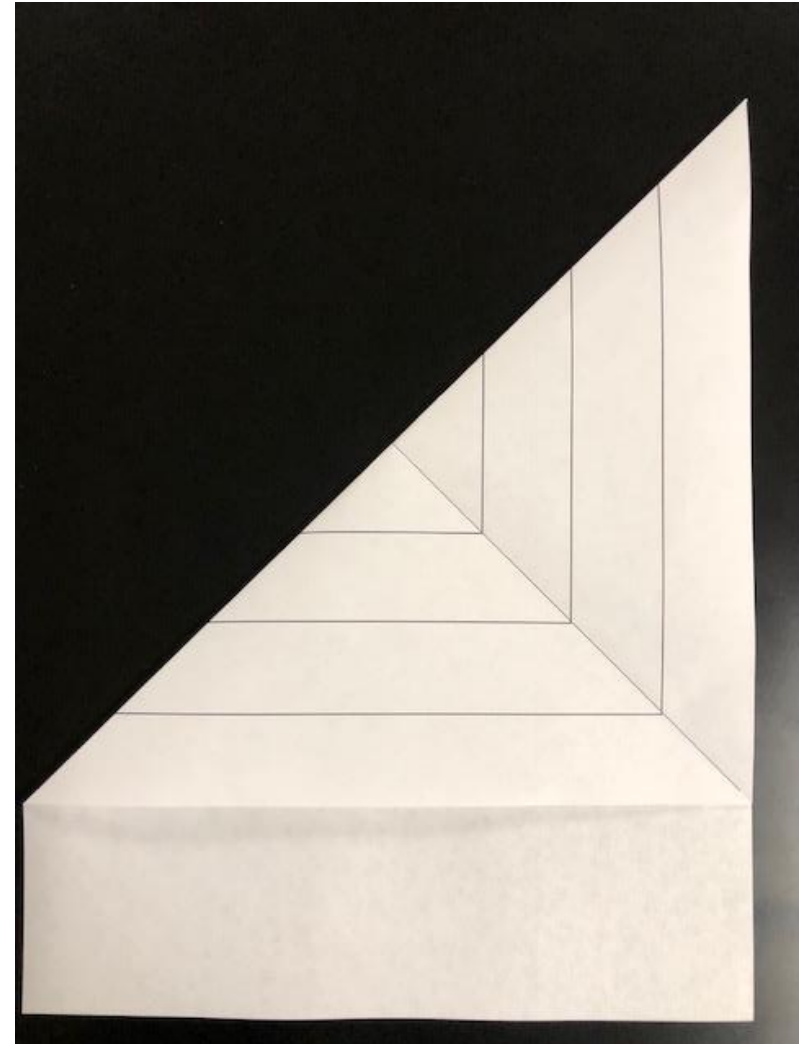
Building your pyramid foldable

- Flip the page over and fold the upper left corner down to the right side of the page

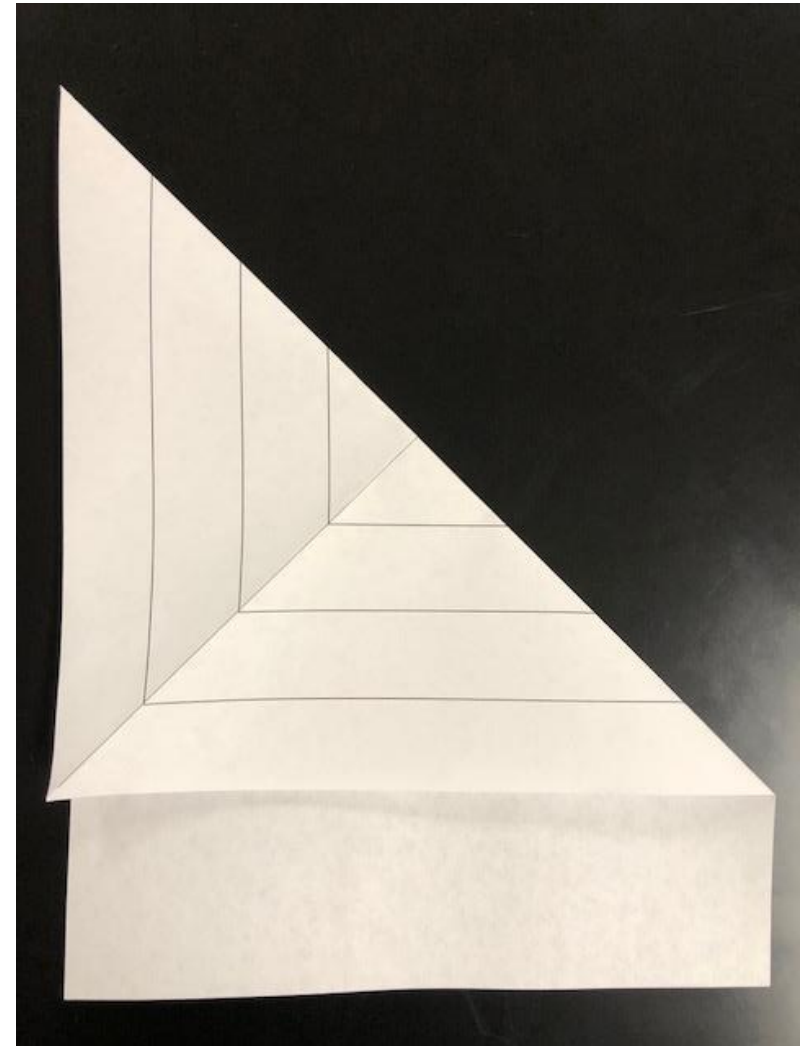
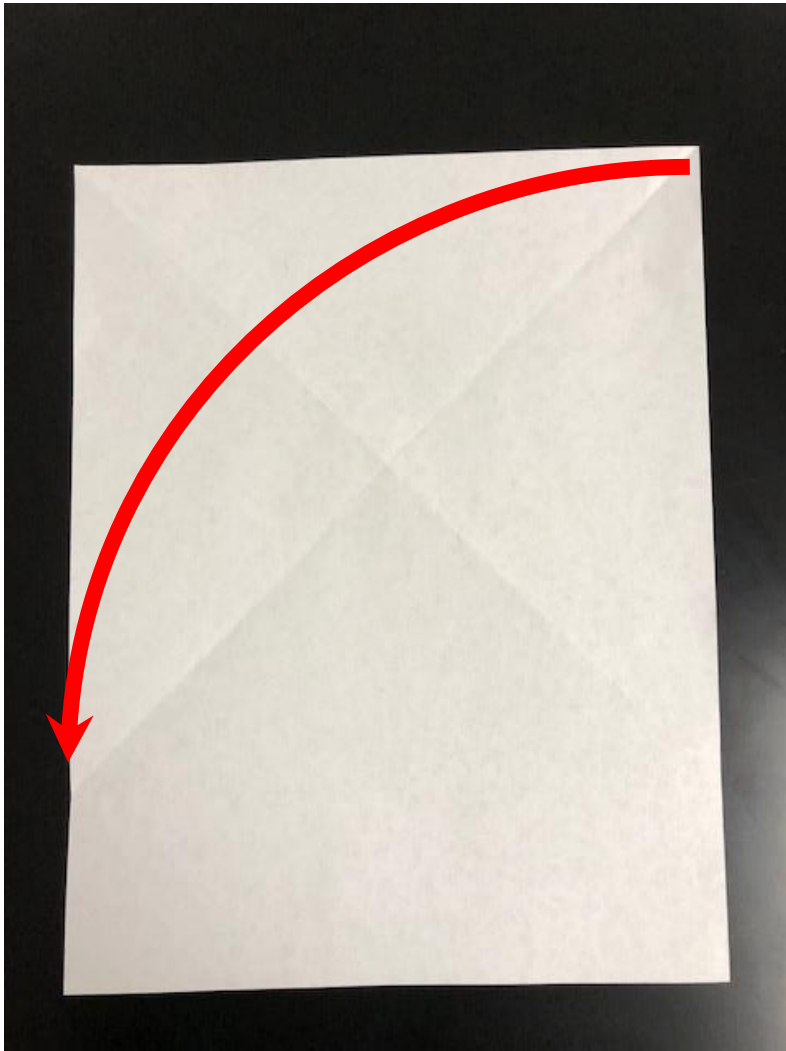


Building your pyramid foldable

- Open up the paper and do the same thing from the upper right corner down to the left side of the page

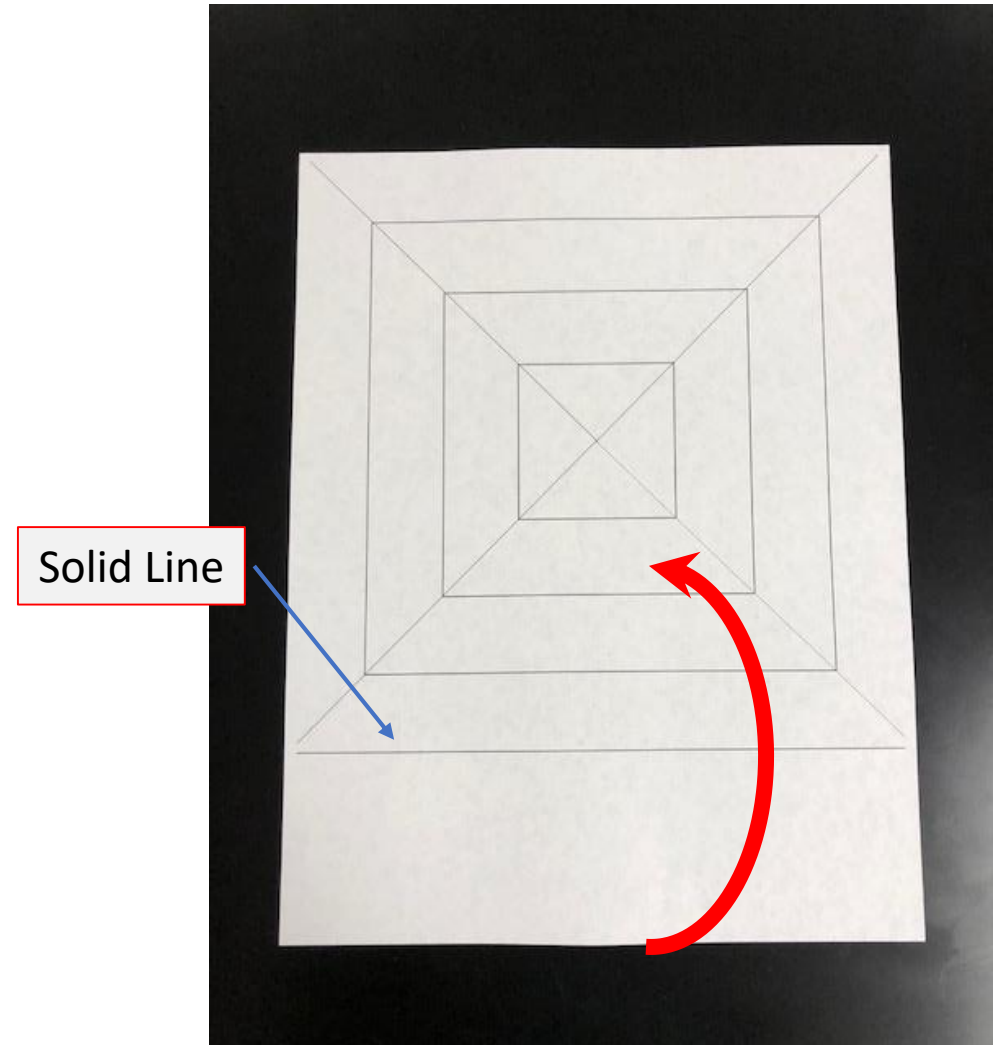


Building your pyramid foldable



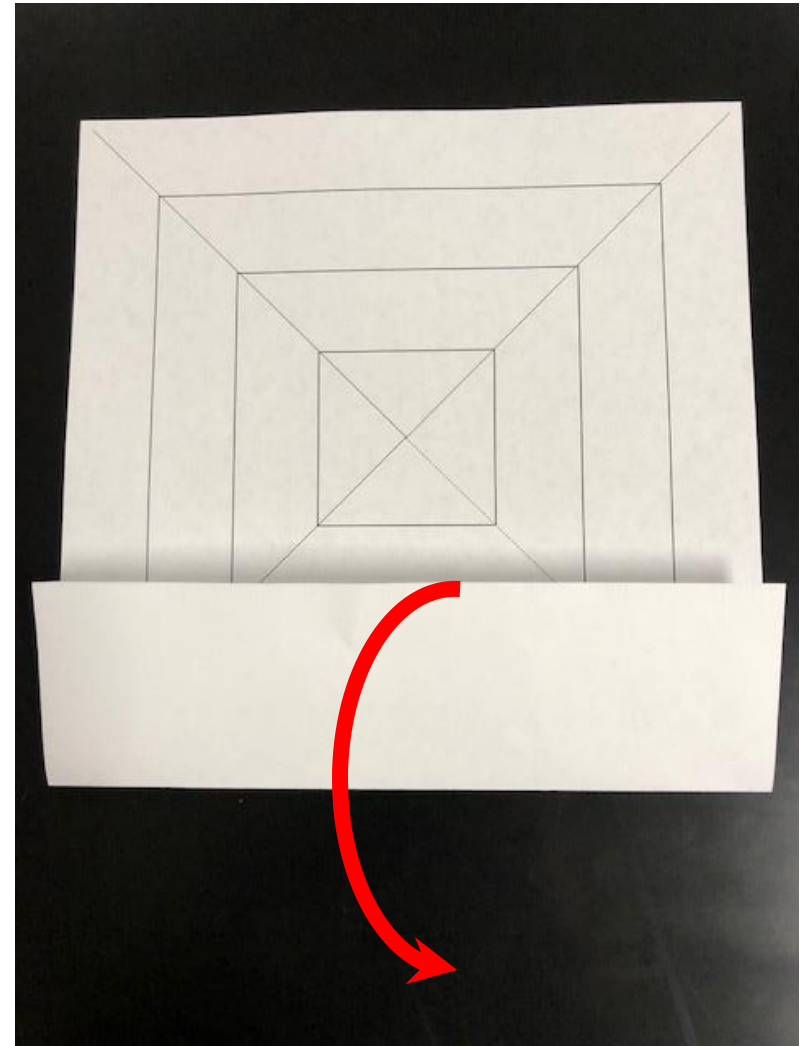
Building your pyramid foldable

- Fold the flap up on the horizontal solid line



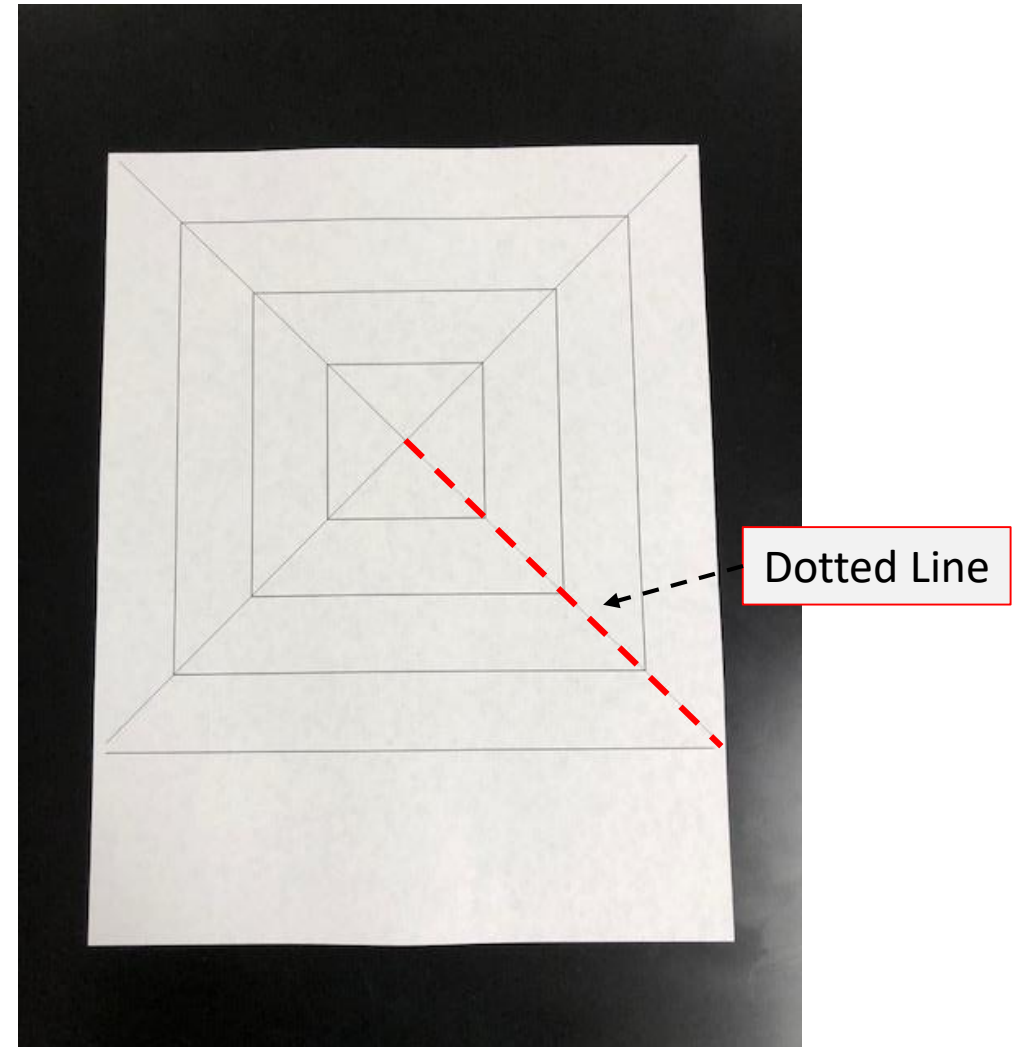
Building your pyramid foldable

- Fold the flap back down and find a pair of scissors



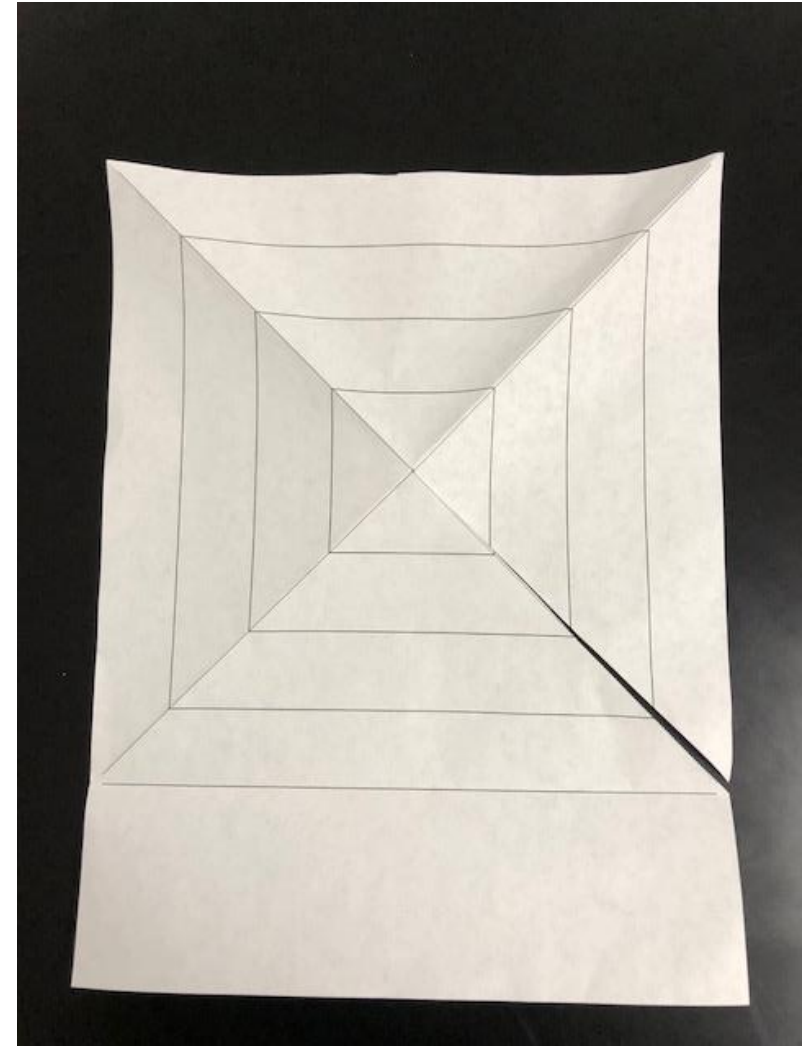
Building your pyramid foldable

- Find the dotted line and cut from the lower right corner to the center of the crossed lines



Building your pyramid foldable

- When you've finished your sheet should look like the image to the right

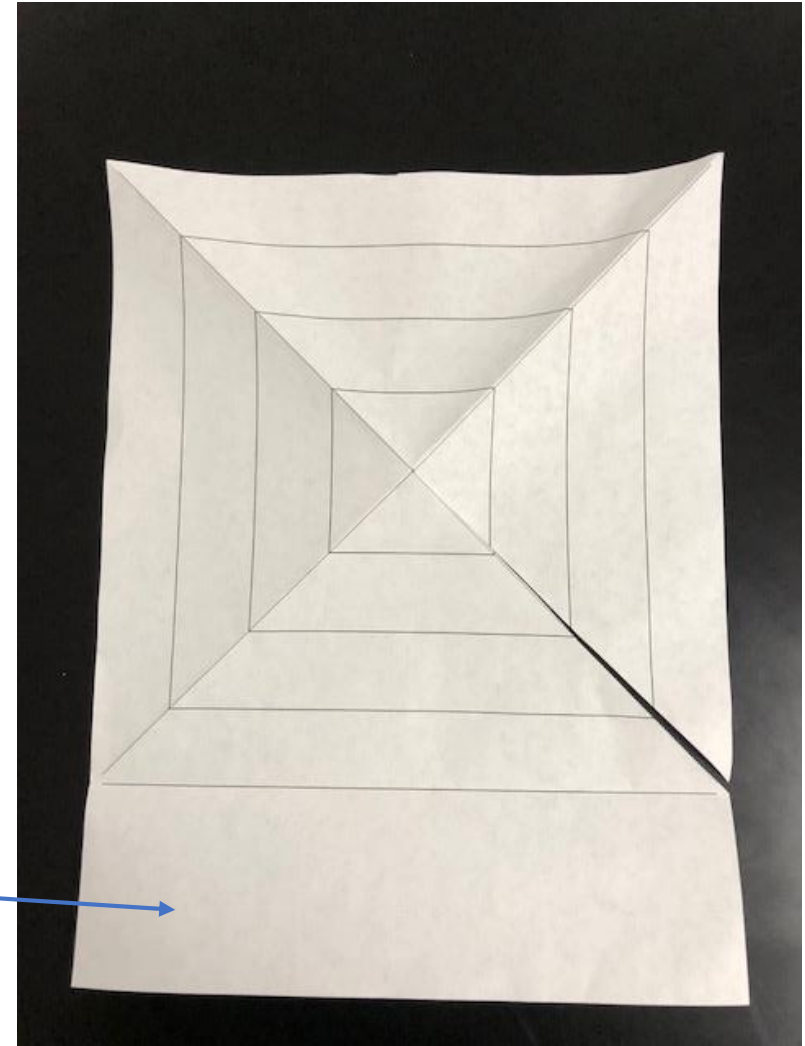


Front Flap

- Define the following words on the front flap:

- 1) Energy pyramid
- 2) Biomass pyramid
- 3) Numbers pyramid
- 4) Biomagnification

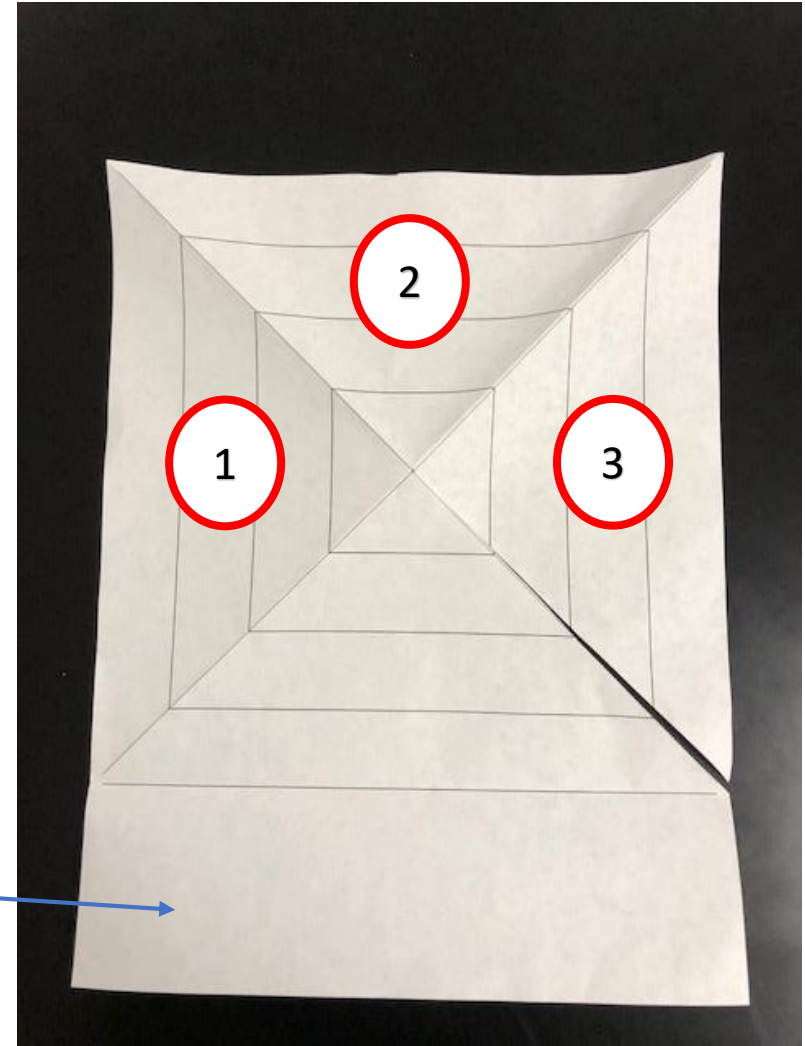
Define words here



Pyramid Sides (Front)

- Energy Pyramid will go on..... (1)
- Biomass Pyramid will go on... (2)
- Numbers Pyramid will go on.. (3)

Define words here



Energy Pyramid ①

- Label trophic levels (Producers, Primary (1°) consumer, Secondary (2°) consumer, Tertiary (3°) consumer)
- Start with 100,000 J on the Producer trophic level (Write this energy on the lowest trophic level)
- Follow the 10% rule to complete the transfer of energy to the top trophic level

Biomass Pyramid 2

- Label trophic levels (Producers, Primary (1°) consumer, Secondary (2°) consumer, Tertiary (3°) consumer)
- Start with 5,000,000kg on the Producer trophic level.
- Follow the 10% rule to show the loss of biomass as you reach the top trophic level
 - This shows how much mass can be supported by the trophic levels below

Numbers Pyramid 3

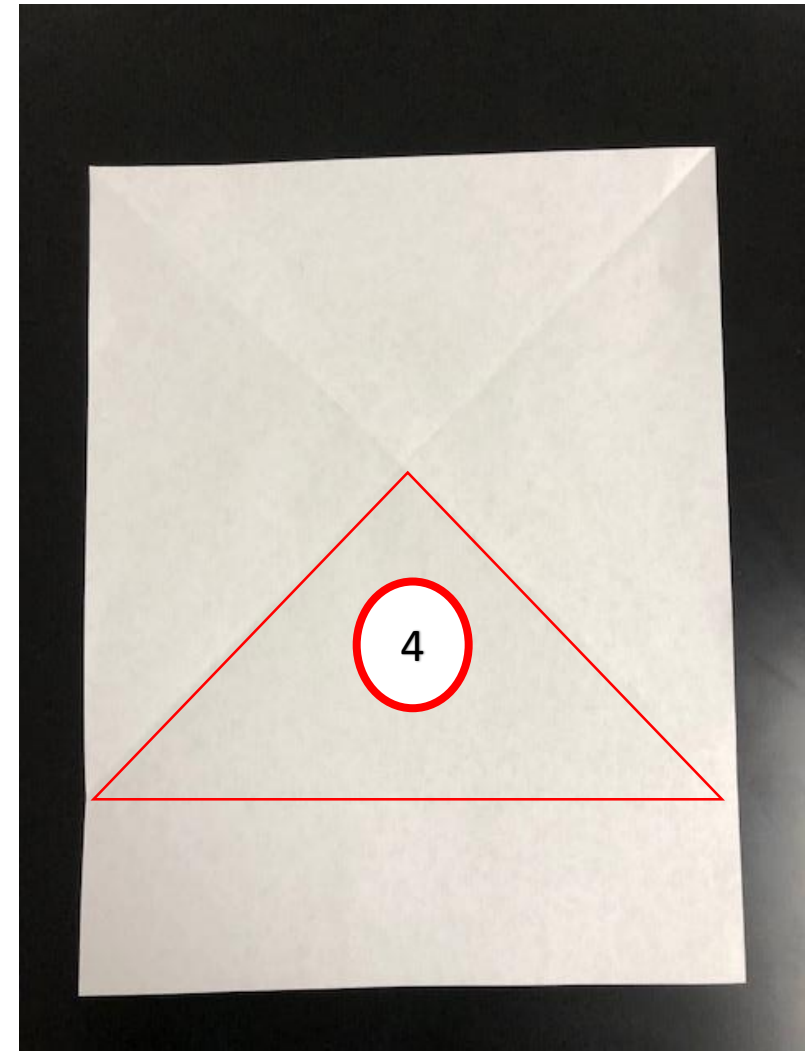
- Label trophic levels (Producers, Primary (1°) consumer, Secondary (2°) consumer, Tertiary (3°) consumer)
- Write **1,576,308 Plants** on the producer trophic section
- Write **145,576 Grasshoppers** on the primary consumer trophic section
- Write **14,009 Mockingbirds** on the secondary consumer trophic section
- Write **1,221 Red Tail Hawks** on the tertiary consumer trophic level section.

Does this numbers pyramid follow the 10% rule?

Explain why on the producer trophic level section. Circle your answer with a colored marker.

Pyramid Sides (Back)

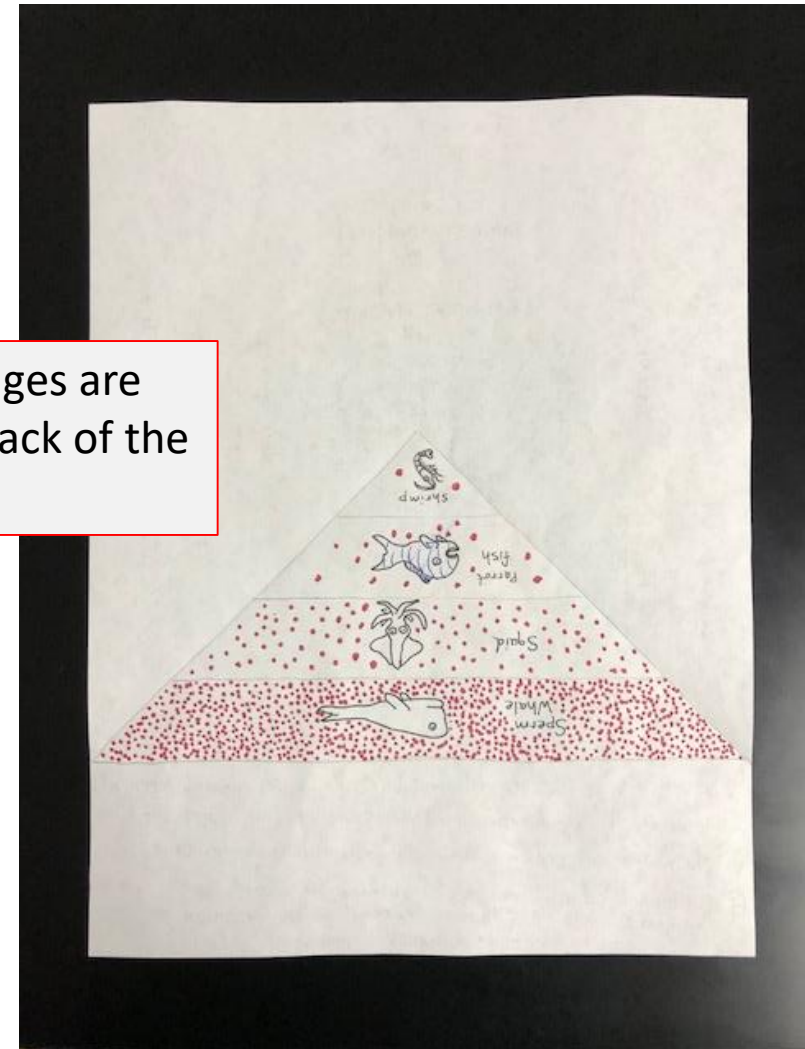
- Flip the page over
- Biomagnification will go on..... 4



Pyramid Sides (Back)

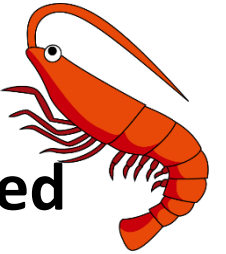
Back

Notice how the images are upside down on the back of the foldable



Biomagnification

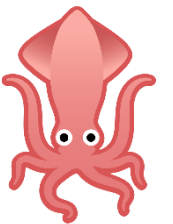
- Flip your paper pyramid folder upside down, so you are looking inside.
- On the smallest tip, vertex of triangle, **draw a shrimp** and **place 2 colored dots** around it.



- In the next largest trophic level **draw a Parrot fish** and **place 15 of the same colored dots** around it



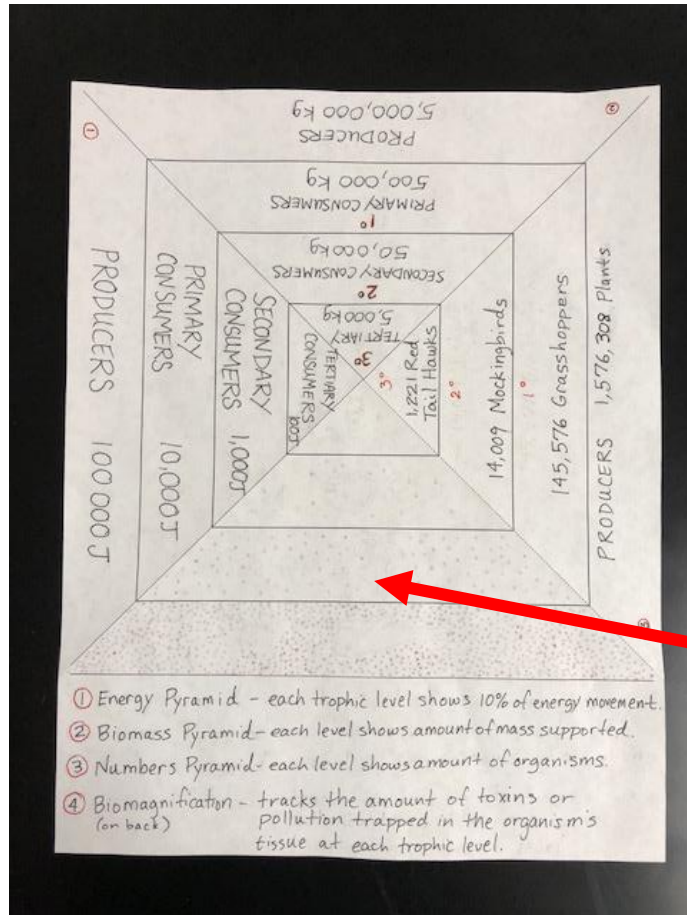
- In the next largest trophic level above that **draw a Squid** and **place 100 of the colored dots** around it



- In the largest trophic level section **draw a Sperm Whale** and **place as many colored dots as will fill the section** around it

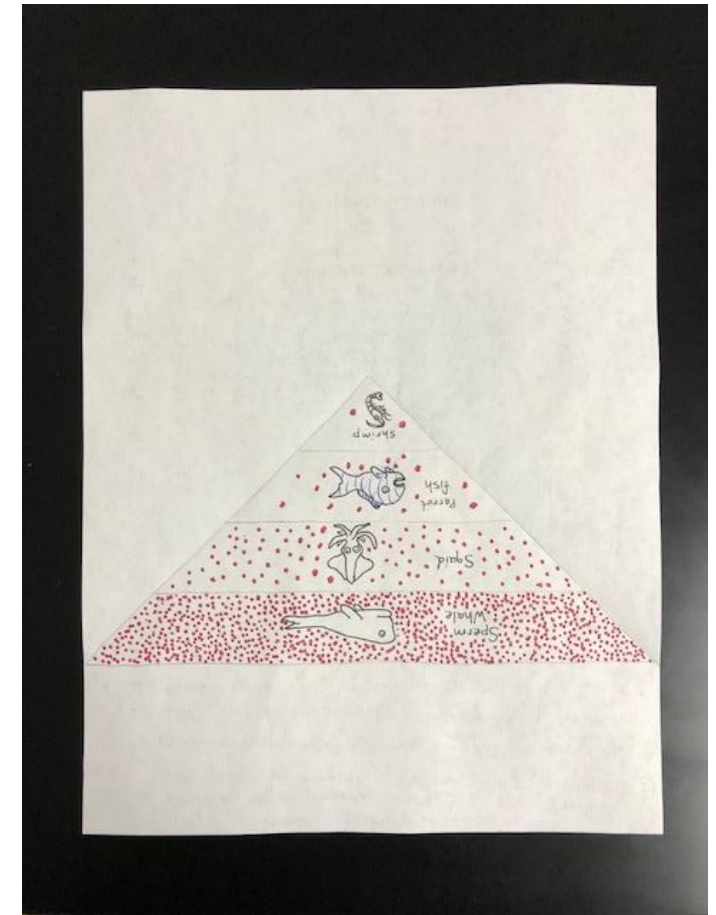


Completed Pyramid Sheet



Front

You will leave the first triangle of the pyramid blank on the front because the Biomagnification pyramid will bleed through from the back



Back