Caution: Balloons are fun toys, but can be dangerous like all toys...PLEASE make sure small children do not chew balloons or have access to broken bits. We would like all our kids to grow healthy and happy. I ask you to be responsible like professional balloonist. Adult supervision is recommended.

Half of a ½ of a .50

Material Need: 3-260 twisting balloons, ruler and a marker.

Working with 1/8, 1/4, 1/2, and wholes

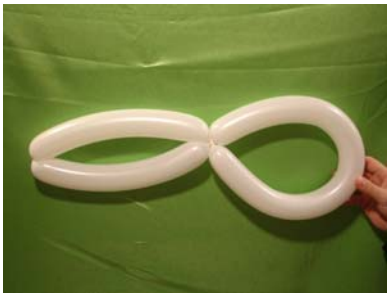
This homeschool curriculum will help develop the students understand of 1/8, 1/4, 1/2, and wholes. The final exercise uses 3-260 balloons to develop a 3 balloon flower.

1. Inflate 1-260 balloon and burp*, leaving ½ inch tail. Tie the ½ tail to the nozzle of the balloon making a circle. Divide the balloon into two equal segments. How many segments/balloons are there? Write this as a fraction and as decimal.

2. Using the balloon above. Take a segment and twist that in half. How many ½ segments make up a whole segment?

3. Take the second segment and divide it in half. How many ½ segments do you have all together? Using a marker and number each segment one though four. Write each segment as a fraction. What is the decimal value for each segment?

4. Twist segment one and two together. If segment one and two are combined, who much of the balloon remains?



* Burping: Releasing a small amount of air from a balloon after inflation and before tying ... this softens the balloon and can makes it easier to twist and easier to tie.

5. Fold the balloon in half. So segment one and two lay on top of segment three and four (*figure a*). Using two hands push the twisted end together (*figure b*). While holding them together twist the top half balloons in counter clockwise direction one full revolution. (*figure c*) This will lock the interesting balloon bubbles together.

Figure a

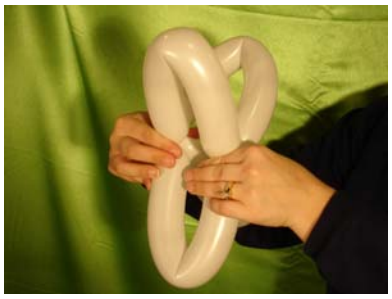


Figure b

Figure c

6. The balloon will know resemble what two mathematical symbols?

7. Where the two line cross is called _____ section.

8. Create a second balloon like the first. Fold it in half, than half again and twist together. How many segments does the second balloon have?

9. Take the two balloons that look like a plus signs and twist the two intersections together. You have combined a four segment balloon with another four segment balloon. How many segments do you have?

10. Write each segment name in a faction on the balloon segment.

11. 4/8 is really what fraction. How many balloons is 4/8?

12. Using the 8 segment balloon. If each segment is worth $0.25 how much money would you have?

13. Using a new balloon. Inflate and measure its length, rounding to the nearest whole number. If the balloon is divided in ½ how long is each section?

14. If we assume the balloon is 60 inches long and each segment or quarter is 15 inches long? How long is a ¾ of a balloon?

15. Using the 8 segment balloon turn every other 1/8 balloon a quarter turn.

How to Create a Flower

Inflate a 260 balloon and burp the balloon to leave a 1/2 inch tail. Tie the tail to the nozzle creating a circle. Take the balloon and fold it into four segments. Make a second balloon like the first. Intersect the two balloons to create an eight segment balloon flower. Take every other 1/8 segment and give it a quarter twist.

Inflate a third balloon ¾ of the way. Find the ½ way point. Find the ½ way point from the nozzle to the balloon center. Twist these points together. Find the ½ way point from the twisted center to the remaining balloon. Twist the new created center to the ½ way point. This will create the stem of the flower. Take the remaining balloon tail and twist the tail into the intersection of the 1/8 and ¼ segment so the 8 pedal flower. Wrap around one to two times to secure stem to the flower

* Releasing a small amount of air from a balloon after inflation and before tying ... this softens the balloon and can make it easier to twist and easier to tie.

Twisting Tip:

Carefully tie the balloon. When twisting a balloon, always start at the end with the knot. Do not worry, it will not break if you twist it, but you must hold on to both ends of the balloon. Otherwise, the balloon will untwist. The balloon will not stay twisted by itself. You have to twist or lock the balloons together.

Advance Assignment

Define these parts of a flower

- Petal
- Receptacle
- Flower Stem
- Stigma
- Style

Adding Detail to the Flower

Use a 5-inch round balloon, inflate to a small ½ inch bubble. Tie and insert this balloon into the center of the flower. For an anatomically correct flower, use the 5-inch round balloon making sure you have stigma and style. Attach the 5-inch balloon to the intersecting petals.