

# Question:

Which brand of compostable cup decomposes fastest?





# Hypothesis

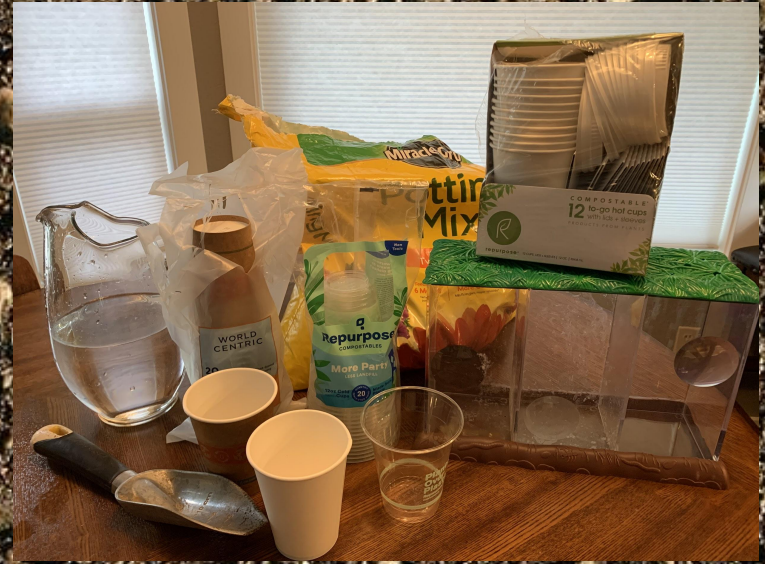
I predict that the Repurpose brand will decompose faster.





# Materials

- Soil
- Shovel
- Pitcher
- Water
- World Centric compostable cup (papery)
- Repurpose compostable cup (papery)
- Repurpose compostable cold cups
- Compost kit /container





# Variables

**Manipulated Variable:** The different kinds of cups

**Controlled Variables:** The soil, the same amount of worms and the same amount of time

**Measured Variables:** How much a compostable cup decomposes



# Procedure

1. Buy the cups, soil and compostable kit.
2. Fill the kit one third of the way full with soil.
3. Put the cups in different sections.
4. Then cover the cups completely with soil.
5. Add a half a cup of water.
6. Wait a week then check on the cups.
7. Repeat the steps 4 through 7 until you pull out the cups and one of them has decomposed all the way.





# Observations and Data:

	WEEK 1	WEEK 2	WEEK 3	WEEK 4
<b>Repurpose</b>	Soggy, has yellow spots, softer, inside is still smooth, thinner, and unraveled at top.	Mold, thinned, color browned, it came apart at the seams,	Mold, unraveled at the seams	Pieces have broken off, the tops are totally unraveled, you can see the layers, can't stand as a cup.
<b>World Centric</b>	Unraveled at the top, inside is same, thinner,	Mold, thinned,	Ripped in half, very thin in some places, a ton of mold,	When it got ripped it totally unraveled and lays flat cannot stand as a cup, the tops have unraveled, ripping a lot, can see all the layers,
<b>Repurpose Cold Cups</b>	No change.	A few cracks.	Split, bent starting to break down.	One more crack

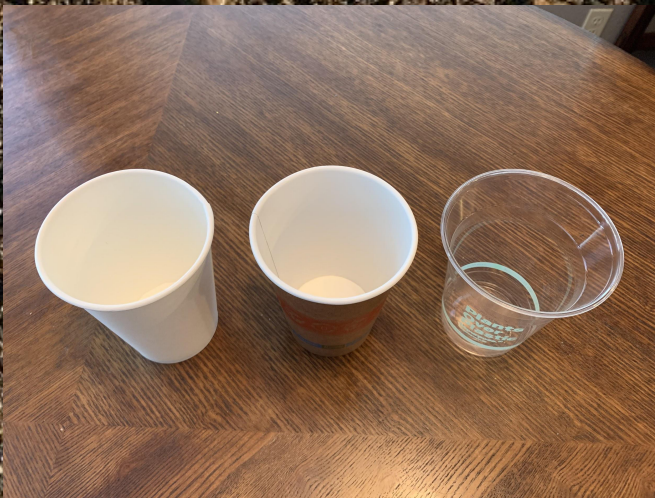




**Repurpose**



**World Centric**



**Repurpose  
Cold Cups**



# Week 1



Repurpose



World Centric



Repurpose Cold  
Cups



# Week 2



Repurpose

World Centric

Repurpose Cold  
Cups



# Week 3



Repurpose



World Centric



Repurpose Cold  
Cups





**Week 4**



**Repurpose**



**World  
Centric**



**Repurpose  
Cold Cups**



# Conclusion

My hypothesis was proven incorrect. I know this because the data proved that the world centric cup decomposed first. Furthermore, the Cold Cups did not decompose fast at all. Both of the papery ones decomposed way faster than the Cold Cups. So basically the World Centric cup decomposed before the Repurpose cup and the Repurpose cold cup. The data tells me that in the beginning the Repurpose brand had the most change but then towards the end the World Centric cup did a ton of decomposing. So next time you go to the store to look for cups buy the World Centric cup because it's better for the earth. In conclusion, the World Centric cup decomposed first.

