

DIAPER DISSECTION

C67

PURPOSE & HYPOTHESIS

I think that the cloth diaper will not hold the most fluid.

I think the adult diaper will hold the most fluid.



RESEARCH

- The water-absorbing chemical in a **diaper** is a **polymer**... **A polymer is simply a long chain of repeating molecules.** “Poly means many, and **polymer** is a long chain of molecules made up of many smaller units, called monomers, which are joined together.” <https://www.stevespanglerscience.com/>
- Disposable diapers have a lot of risks and it takes up alot in landfills and is bad for the environment.
- **20 billion disposable diapers are dumped in landfills.**
- **200,000 trees are lost to the making of disposable diapers** in the United States alone.
- **Disposable diapers take 500 years to dissolve.**
- These disposable diapers **release methane into the air** that is bad for us to breathe and can cause fires.
- Disposable diapers can **contaminate our groundwater** from the landfill.



POLYMER *absorbs
the water.*

MATERIALS

- 4 disposable diapers
- 1 cloth diaper
- 5 ziploc bags
- 1 sharpie pen
- Warm water
- 1 scissor
- 1 pencil/notebook
- ¼ cup measuring cup



EXPERIMENT



STEP 1:
Cut the diaper in
small squares



STEP 2:
Pour water into
the $\frac{1}{4}$ cup



STEP 3:
Pour the water
into the diaper
square



STEP 4:
Write down how
many $\frac{1}{4}$ cups it
takes



STEP 5:
Put the wet
diaper square in
the bag and write
the diaper brand



STEP 6:
Add up all the
total cups used of
each diaper and
write down the
total to see which
diaper holds the
most water

*Repeat step 3 until the
water leaks from diaper.*

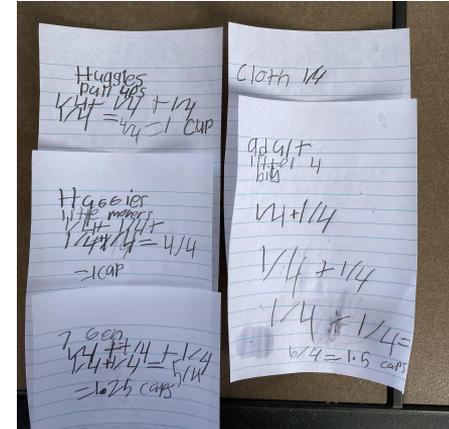
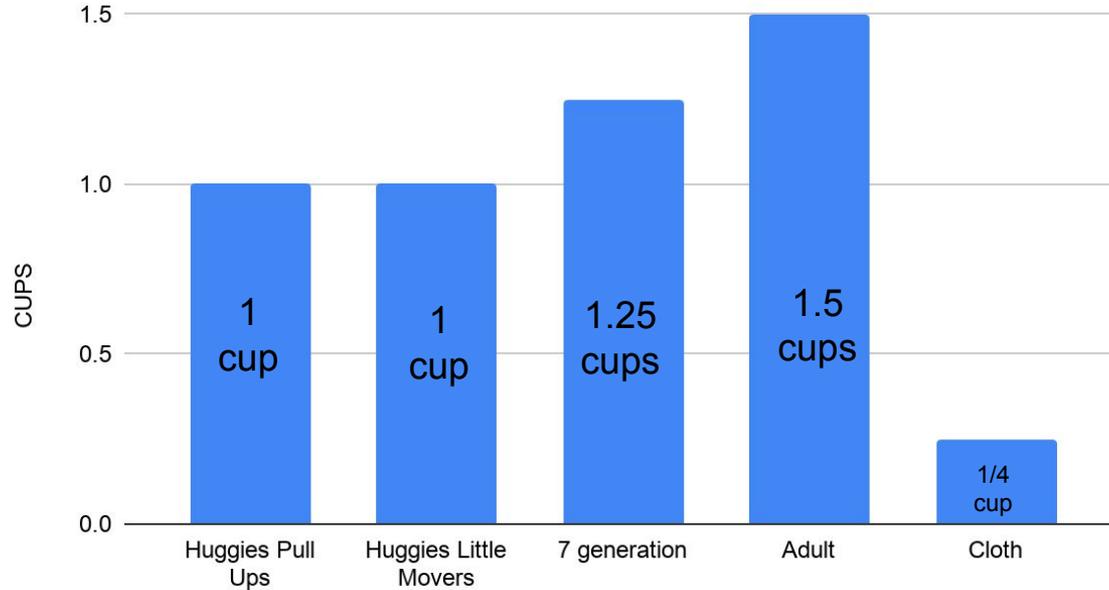
PHOTOS



ANALYSIS

*My hypothesis was correct. **Adult Diapers hold the most water.***

DIAPER DISSECTION RESULTS



CONCLUSION

- My experiment showed that the adult diaper holds the most water. I think because adults urinate more than babies.
- **My hypothesis was correct** that adult diapers hold the most fluid and that cloth diapers hold the least fluid because they do not have polymers so it does not absorb water as much.



REAL WORLD CONNECTION



- **Cloth diapers** cost less than disposable diapers so it helps families that do not have money.
- **Cloth diapers** are better for the environment but the cons are that they are not convenient if you are not home and you have to wash them daily so you use more water to clean them.
- **Disposable diapers** are not good for the environment because they carry a lot of bacteria and viruses because of the baby poop and also because it fills our landfills and is bad for us since it takes 500 years to dissolve.
- **Some things that we can do to help the environment is to throw the baby poop in the toilet before throwing it in the trash can and wrapping it really tight.**
- **I think more people should use cloth diapers** because it is better for the environment.
- **Disposable diaper companies** should make better diapers for the environment since they are easier to use since it absorbs more water and more people probably use them.



WORKS CITED

- <https://www.stevespanglerscience.com/>
- Education.com
- Oureverydaylife.com

THE END

Thank you for your time!