[redacted]

Question-Do big acorns crack more easily than small acorns?

Introduction

- Acorns come in different sizes and shapes. Some acorns are big, and some are small. Animals like squirrels crack acorns to eat what is inside. Scientists ask questions to learn how objects are different. This project explores whether the size of an acorn changes how easy it is to crack.

Question & Prediction

- **Science Question:**
  Do big acorns crack more easily than small acorns?
- **Prediction (Hypothesis):**
  I think big acorns will crack easier because they are heavier.

Investigation: Methods & Procedures

Materials:

- 3 big acorns
- 3 small acorns
- Spoon or small rock
- Paper towel
- Adult helper
- Chart paper
- Crayons

Steps:

1. Sort the acorns into big and small.
2. Place one acorn on a paper towel.
3. With an adult helper, gently tap the acorn with a spoon.
4. Watch to see if the acorn cracks.
5. Count how many taps it takes to crack.
6. Repeat with all acorns.
7. Record the results.

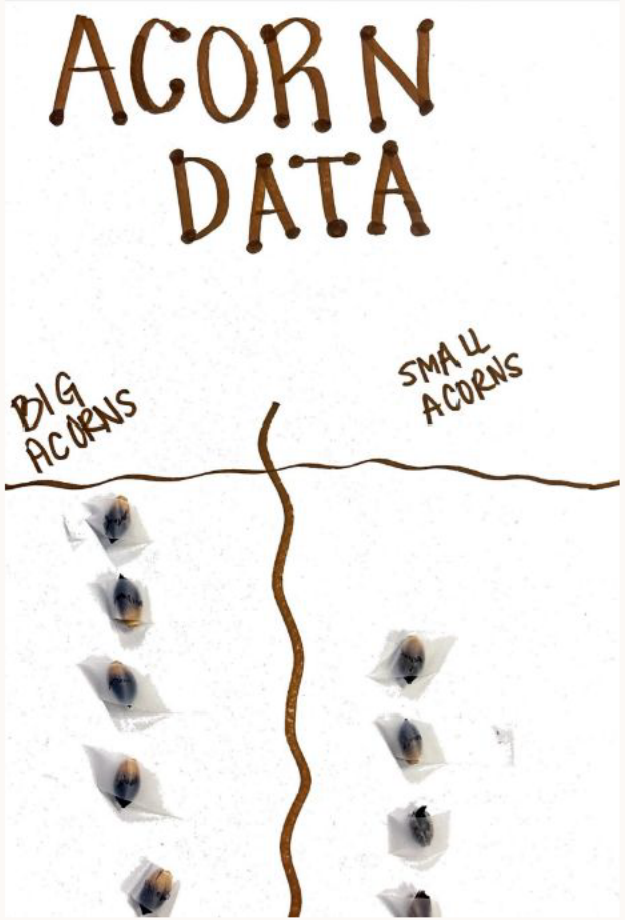
Results & Data Visualization

Results Example:

- Big acorns cracked: **3**
- Small acorns cracked: **1**

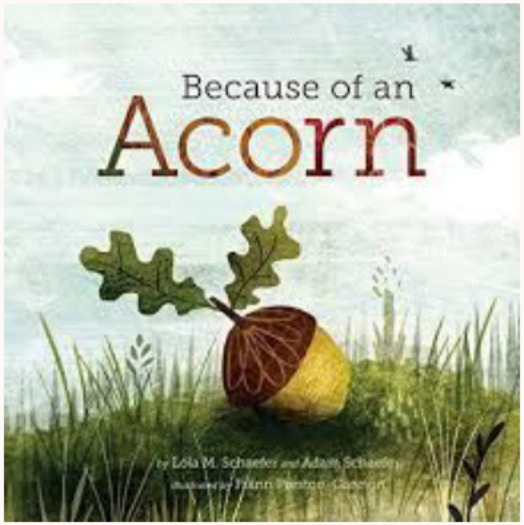
Data Visualization:

We tested big and small acorns. More big acorns cracked than small acorns, so we learned that big acorns crack more easily.



Discussion & Interpretation

More big acorns cracked than small acorns. This may be because big acorns are heavier and break more easily. Small acorns may have harder shells. This shows that size can affect how strong an acorn is.



Implications & Ideas for Future Research

This experiment helps us understand how animals eat acorns. In the future, we could:

- Drop acorns from different heights
- Test dry vs. wet acorns
- See which acorns animals choose first
- Compare acorns from different trees

References

National Geographic Kids. (n.d.). *Acorns and oak trees.*

Scholastic. (n.d.). *Seeds and plants.*

Science Buddies. (n.d.). *Preschool science investigations.*