

INVESTIGATION QUESTION

How does physical structure affect the number of organisms that can survive in an ecosystem?

HYPOTHESIS

Hint: try writing it as "If ____, then ____, because ____."

Results Table

Condition	Number of Objects Placed	Number That Stayed After Tilting/Blowing	Percentage That Stayed
Flat tray (no reef)			
Tray with reef structure			

Calculate

Which condition had a higher survival percentage? By how much?

ANALYSIS

How does this model explain why coral reefs support so much biodiversity in real oceans?

CONCLUSION

The concept of surface area is key here. Explain in your own words why more physical complexity in an ecosystem allows more species to coexist.

CONNECT IT

Look up coral bleaching. What causes it, and how does it affect reef biodiversity? Find one recent data point about reef loss.

THINK FURTHER

The Ordovician ended with a mass extinction that destroyed many reef ecosystems. How long do you think it would take for a reef ecosystem to recover after a mass extinction event?

ADDITIONAL NOTES