INVESTIGATION QUESTION
How does an internal skeleton affect an animal's ability to support weight and grow larger?

HYPOTHESIS

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

Results Table

Creature	Has Internal Support?	Objects Supported Before Collapse	Observations
Without pipe cleaner spine			
With pipe cleaner spine			

Calculate

How many times more weight could the vertebrate creature support? Show your work.

ANALYSIS

Why does an internal skeleton allow vertebrates to grow larger than most invertebrates?

CONCLUSION

What advantages would having an internal skeleton give a Permian land animal compared to an exoskeleton? What disadvantages might an endoskeleton have?

CONNECT IT

Dimetrodon is often mistaken for a dinosaur. Look up the synapsid lineage and explain why Dimetrodon is actually more closely related to you than to any dinosaur.

THINK FURTHER

The Permian Period ended with the Great Dying -- the worst mass extinction in Earth's history. Therapsids (mammal-like reptiles) survived it while many other groups did not. What features might have helped them survive?

ADDITIONAL NOTES