



Year of the  
Dragon



# ENGINEERING A DRAGON

Dragons are fictional animals usually depicted as large, powerful dinosaurs or lizards with four legs, a long tail, and wings. They are famous for breathing fire and often live in the mountains.

If dragons were real animals, they would most likely be cold-blooded reptiles who hatch from eggs and sit at the top of the food chain!

For a dragon to have any hope of flying, it would need strong, but lightweight bones. Birds have hollow bones filled with air sacs connected to their respiratory system, which provides a constant supply of oxygen needed for energy, allowing them to fly!

This easy science activity demonstrates how strong a hollow tube can be!

## Strong Hollow Bones

### You'll need

Paper  
Tape  
Books  
Paper plate



### Instructions

Roll 4 paper tubes and secure with tape.

Place a paper plate on top of the tubes.

Add books to the top of the paper plate until the columns collapse.

Try this again, but with paper columns folded into triangles and squares.

**You should find the circular column is the strongest, as it doesn't have any edges, so the weight is spread evenly through the column.**

