

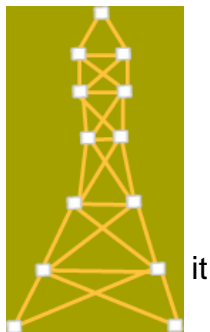
# DINO'S DYNAMOS Experiment

## Spaghetti Structures...

### What you need:

- 1 bag of large marshmallows
- Plenty of dry spaghetti.

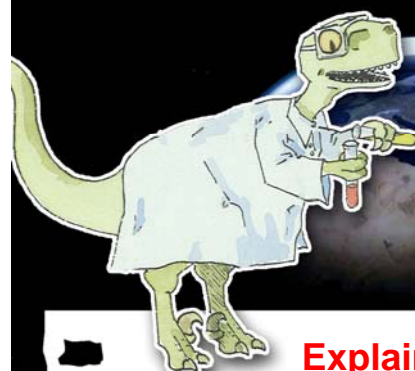
**Step 1:** Make a cube from marshmallows and half lengths of spaghetti. Use the marshmallows to join the pieces of spaghetti at the corners of your cube. Does it feel stable?



**Step 2:** Snap some more spaghetti and put diagonals across each face of the cube. Does it feel more stable now?

**Step 3:** Make a square using marshmallows and half lengths of spaghetti, add four more half lengths to make a pyramid. Try joining several pyramid shapes together, how stable is this structure?

**Step 4:** Now try building the tallest tower you can manage. Can you build one as tall as yourself? Try putting some card on top, what weight it will support? Try using several strands of spaghetti for each side, does this make it stronger?



# DINO'S DYNAMOS Experiment

## Explain the experiment!

From soaring skyscrapers to tiny tents, all successful structures need more than just strong materials. They need to be constructed in the right way too. Some shapes make stronger, more stable structures than others.

**FACT!** Cubes and pyramids make stable structures. Cubes are especially strong if they are reinforced along their diagonals. Pyramids make good structures because they contain **TRIANGLES**, which are one of the strongest shapes.



**Did you know?** When newly completed the Great Pyramid at Giza rose 146.7m tall - that's nearly 50 stories high!

