

## Dynamics and Statics

# Balancing bird

(Georgia)

### Background

All objects have a balancing point, called the centre of gravity. The lower you make the centre of gravity the more stable the object is.

By finding the centre of gravity, you can make a toy that can easily balance.

### You will need

- ✓ A bird made from papier mâché,
- ✓ skewers,
- ✓ elastic bands,
- ✓ pipe cleaners,
- ✓ feathers,
- ✓ sticky tack,
- ✓ wooden/plastic base or flower arranging foam

### Follow these steps

1. Make a bird from papier mâché, complete with tail feathers, a pipe cleaner balance and goggle eyes.
2. Stick two upright skewers parallel to each other onto a wooden/plastic base or into flower arranging foam.
3. Use elastic bands to connect another skewer onto the two upright skewers.
4. Balance the bird on this skewer by curling the pipe cleaners.

### What next?

Try making a cardboard balancing clown, a balancing acrobat made from a pipe-cleaner & play dough, or a bird that can balance with wings outstretched.

### So what happened?

Your bird will now be able to perch on the skewer without falling over.

