Energy Converter

Cotton Reel Car

You will need:

- Cotton reel
- Elastic band
- Stick eg. skewer or pencil
- 1x match stick

Method:

- Break the match at both ends (don't snap it) so it makes a U shape.
- Put the elastic band over the broken stick and thread the band through the cotton reel.
- Place the skewer/pencil through the end of the elastic band.
- Wind up the end of the elastic band with the skewer and let it go, watch your cotton reel move!
- If your car isn't moving, try pulling the stick away from the cotton reel to stretch the elastic band and reduce friction.

The science bit:

- When you wind up the elastic band it begins to store Potential energy.
- When you let go, it starts to untwist, but because of the skewer it can't untwist fully.
- This makes the other end of the elastic band start to untwist, and because the broken match stick is attached to the cotton reel, the reel turns with the elastic band!

Why not try?

- Making more than one and racing them!
- Trying different materials.



