

Spinning CD

Make sure you don't use a really crucial CD for this experiment as it may get scratched. Not only is your Spinning CD great fun it even looks a little like a UFO too!

What do I need:

- A CD (only use one that you don't mind getting damaged!)
- Maybe even a vinyl record too (optional)
- Lollipop stick
- String

How do I do it?

STEP 1 - Tie your string around your lollipop stick.

STEP 2 - Thread your string through your CD.

STEP 3 - Lift your string into the air and notice how your CD just 'hangs'.

STEP 4 - Give your CD a spin. Is that a UFO?!?

STEP 5 - What would happen if you repeated this experiment with a vinyl record instead of a CD?

WARNING: Be very careful if you use a record as awesome as 'The Dark Side of the Moon'!

What's going on?

Did you notice that when you swung your Spinning CD from side to side the CD stayed flat?

This all comes down to something called 'angular momentum'. You can just think of this in the same way as 'normal' momentum. If you have a ball rolling along on a flat surface it will continue to roll until the friction with the ground slows it down.

Angular momentum works just the same way but with things spinning rather than travelling in a straight line.

More Fun Please - Experiment like a real scientist!

- Could you make your own spinning object out of card?
- What shape would work best? Does it have to be circular? What about a triangular shape?
- How about adding some weight to the edges of one of your spinning objects with some Blu-Tac, how does that change things?

