Waves and sound

Sounds nuts

Spinning a nut in a balloon creates cosmic sound effects

You will need....

- ✓ A balloon
- ✓ A nut from a bolt of any size

Background:

Due to centripetal force the nut spins around the inside of the balloon. As it rolls the six sides of the nut strike the wall of the balloon and produce a note.

Follow these steps:

- 1. Place the nut in the balloon.
- 2. Blow up the balloon and tie the neck.
- 3. With a swirling movement roll the nut around inside the balloon.

So what happened?

The frequency depends on the rate of spinning: fast: high pitched; slow: low pitched.

What next?

 Experiment with different sized balloons, different objects such as coins and mints with holes.

