

Practical 4 – Topic 5

The oscillation of one magnadur magnet over another

Criteria assessed

- DCP
- CE

Depending on the information given, this can be a very good design experiment as well.

Materials needed

- Vertical stands with clamps
- Meter rule
- Ruler
- Two identical magnadur magnets (these have their poles on their flat surfaces)
- Stopwatch

What to do

- Attach one of the magnets to the lab bench with sticky tape.
- Hang the other magnet from strings of equal length attached to a horizontal support directly above the first magnet. The poles must be such for the magnets to attract each other.
- The distance d between the magnets is as shown. Displace the top magnet and release it so that small oscillations take place in a direction normal to the plane of the paper.
- Measure the period T of oscillations.
- How is T related to d ?
- Do you get the same result if the polarity of the top magnet is changed?

