110424

1. Overview

We heard that homemade demonstrations often have great impact.

Attendees were invited to watch a collection of short videos of demonstrations which deployed homemade equipment. They were asked to be mindful of the following four questions (and invited to send their answers by email to David.Keenahan@iop.org)

- 1. How might students become part of the demonstration?
- 2. Can they experience the concepts in a tactile way?
- 3. What value do demonstrations add to a lesson?
- 4. What suggestions would you make?

The Hub-97 PowerPoint has images and notes relating to each video clip.

The video titles were:

- 1. Sound sandwich
- 2. Balloon powered car
- 3. Circular motion with a tennis ball
- 4. Loop-the-loop energy conversions demonstration
- 5. Levers and fulcrum with metersticks
- 6. Pressure -- Thumbtack cushion
- 7. Hydraulic action
- 8. Explore momentum and energy with clackers
- 9. Buoyancy and Cartesian diver
- 10. Kebab wave machine
- 11. Action at a distance -- electrostatics
- 12. Light a bulb with only one wire
- 13. A simple electric motor
- 14. F = Bil illustrated with a trapeze made of bare copper wire
- 15. Model of an electric motor
- 16. Small electric motors
- 17. Test tube of iron filings
- 18. Make a model of an anemometer
- 19. Slinky seismometer
- 20. Standing waves generated by a milk frother

Weblinks:

Light a bulb video: https://www.youtube.com/watch?v=aIhk9eKOLzQ&t=8s

Kebab wave machine Wave Machine Demonstration (youtube.com)

Videos of some of the above: Home • Science on Stage Ireland