

L2.4 Literacy Skills in Physics – 4 (Rev C)

1 Demo of Feather falling in a vacuum

Watch the video BUT **only up to 3:45** (as the remainder is confusing and beyond the scope of this lesson) using this URL <https://www.youtube.com/watch?v=E43-CfukEgs> , but NOTE that you are only being asked about the feather falling in a vacuum, **not** about the ball.

Also be aware that some marks require certain ideas to be linked to have the mark awarded.

Why does the feather fall and why does it get faster as it drops?

a) **Explain using a forces approach (4 marks)**

b) **Now an energy approach is needed (4 marks)**

3 Describing the start of a race

“A sprinter pushes off the blocks and starts to move forward.”

Improve this explanation referring to key physics principles. **(6 marks)**

4 Catching a ball

“Catching a solid (e.g. cricket) ball without hurting your hands”

Watch the video clip using the URL <https://www.youtube.com/watch?v=IQUbko9LbgU>

The video maker concentrates on a number of techniques, but is not interested in using physics to explain how to catch without having excessive pain. You, however, need to concentrate only on the idea of reducing pain. Look at the way the catcher moves his hands whilst catching.

Explain how a solid ball can be caught without hurting your hands, referring to key physics principles.

A momentum approach is required (7 marks)

Don't forget to submit your work