



General Certificate of Education
Advanced Subsidiary Examination
June 2010

Physics

PHY3T/Q10/task

Unit 3 Investigative and Practical Skills in AS Physics ISA (Q) Motion down an Inclined Plane

Task Sheet

This task is worth 10 marks

You are advised to read through these instructions before beginning your work.

You are going to investigate the motion of a small solid cylinder rolling down an inclined plane.

- *The apparatus has been set up to form a ramp for the cylinder to roll down. Do not alter the angle of the ramp.*
- *Measure the time, t , that the cylinder takes to roll different distances, s , down the ramp. You should take repeat readings for each distance you choose.*
- *Present **all** your measurements in a table.*
- *For each value of s , calculate t^2 and include these values in your table.*
- *Plot a graph of t^2 (on the y-axis) against s .*
- *State the precision of the stopclock or stopwatch that you used in this experiment.*

After the Investigation

At the end of the investigation, hand in all your written work, including the graph of t^2 against s , to the supervisor.

This documentation will be required for Stage 2 of the ISA. Please ensure that you have entered your centre details, candidate number and name on all the sheets you have completed.