This module assesses practical skills and is worth 20% of the total mark. Many of the skills should be embedded in practical work throughout G481 and G482 rather than taught explicitly for the tasks.

Prior Knowledge from KS4 (based on a minimum of AQA P2) – Students carry out practical work using standard lab equipment, drawing basic tables and plotting data on line graphs with a line of best fit.

Key vocabulary
- Precision
- Accuracy
- Percentage difference
- Percentage uncertainty

Numeracy
- Sig figs
- Decimal places
- Line graphs
- Calculating gradients
- Determine the y-intercept
- Recognise

Literacy
- Structure a written answer worth up to 5 marks

Documents
- OCR Practical Handbook

Basic Structure

- Run though the format of the practical tasks
- Introduce OCR Practice Qualitative Task
- Review task and feedback to students
- Recap theory relevant to live task
- Pupils to talk through possible scenarios when they know the title of the task they will complete.
- Pupils complete Qualitative Task

- OCR Practice Qualitative Task completed and feedback to students
- Recap theory relevant to live task
- Pupils complete Qualitative Task
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- OCR Practice Evaluative Task completed and feedback to students
- Pupils complete Evaluative Task

Qualitative Task   /10

Learning objectives:	Possible outcomes:	Resources/ideas
Demonstrate skilful and safe practical techniques using suitable methods	Set up standard equipment safely and quickly	Skills embedded within G481/482
Make, record and communicate valid observations	Structure an extended written answer	Literacy embedded within G481/481
Organise results suitably	Draw and populate a table of results	Practice

Quantitative Task   /20

Learning objectives:	Possible outcomes:	Resources/ideas
Demonstrate and describe safe and skilful practical techniques for a quantitative experiment.	Measure length without parallax error	Examples of parallex e.g. reading an analogue meter
Make, record and communicate reliable measurements with appropriate precision and accuracy.	Use significant figures and decimal figures appropriately; Link significant figures in the final quantity to all measured values	OCR Practical Skills Handbook
Analyse the experimental results.	Draw an appropriate graph with a line of best fit; Calculate a gradient with units; Determine the y intercept by substituting in values and using the gradient	Reference to maths; Practice graphs
Interpret and explain the experimental results.	Recognise y = mx +c and fit this to new equations; Use 'm' and 'c' to calculate a physical constant	

Evaluative Task   /10

Learning objectives:	Possible outcomes:	Resources/ideas
Evaluate the results and their impact on the experimental methodology.	Comment on results obtained	Students review their tasks in groups
Assess the reliability and accuracy of the experiment by calculating percentage differences and uncertainties.	Calculate percentage uncertainty for a single reading; Calculate percentage uncertainty for repeated readings; Calculate percentage uncertainty in a line of best fit; Calculate percentage difference	Concept introduced
Evaluate the methodology with a view to improving experimental precision and accuracy.	Structure an extended written answer; Link sources of error to the final result obtained	Exemplar OCR papers analsed
Identify weaknesses in the experimental methodology and measurements.	Name 2 significant sources of error in a task they carried out	Students review their tasks in groups
Suggest improvements to the experimental procedures and measurements.	For each named error suggest an improvement to overcome this error	Students review their tasks in groups