



WESTMINSTER  
SCHOOL

## The Challenge (Specialism)

Specimen Paper First Examination 2027

# SCIENCE PRACTICAL

Time: 60 minutes

## Hanging Masses

Collection of Data (8)	
Presentation of Data (6)	
Analysis (6)	
<b>Total Mark</b>	

Assessor's comments:

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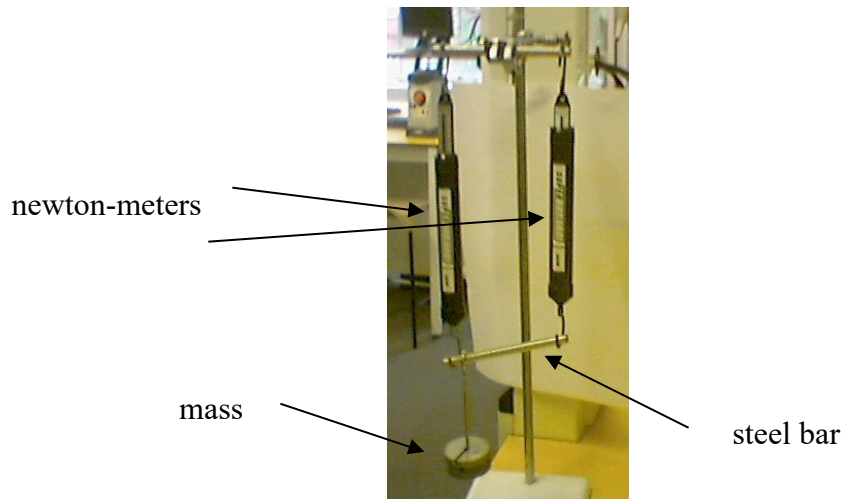
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Assessor's signature:

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You should have a pair of newton-meters hanging side-by-side (in parallel) with a steel bar across the bottom from which a mass can be hung, as shown here:



1. Carefully hang the mass on the bar, 1 cm in from the newton-meter hook. Moving the mass 1 cm at a time along the bar, **record in a suitable table** the values shown on the meters for the different positions of the mass. *Don't forget to include the original 1cm reading and repeat readings, which should also be recorded:*

2. Now **plot a graph** of your results. *You should have two sets of data on the one graph, one for each meter.*

3. Describe any patterns or rules that you notice associated with your data.

4. Write here what you think the readings would be on the two meters if a mass twice as big were hung 7.5 cm from the left-hand meter hook:

Meter 1: \_\_\_\_\_ N

Meter 2: \_\_\_\_\_ N