

**SMART EXAM RESOURCES****9702 PHYSICS TOPIC QUESTIONS****TOPIC: PHYSICAL QUANTITIES AND UNITS****SUB-TOPIC: ERRORS AND UNCERTAINTIES****SUB-SUB-TOPIC: IMPROVING PRECISION**

- 1** Explain why the precision in the value of the resistivity is improved by using a micrometer screw gauge rather than a metre rule to measure the diameter of the wire.

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[2]

## Mark Scheme:

metre rule measures to $\pm 1$ mm and micrometer to $\pm 0.01$ mm (so there is less (percentage) uncertainty/random error)	<b>B1</b>
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