

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

**1** A metal wire has a cross-section of diameter approximately 0.8 mm.

**(a)** State what instrument should be used to measure the diameter of the wire.

.....[1]

**(b)** State how the instrument in **(a)** is

**(i)** checked so as to avoid a systematic error in the measurements,

.....[1]

## Mark Scheme:

1	(a)	micrometer/screw gauge/digital callipers .....	B1	[1]
	(b)	(i) look/check for zero error .....	B1	[1]