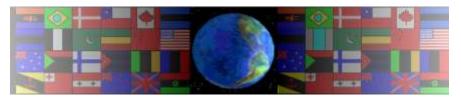
THE MICROMETER

V.Ryan © 2000 - 2009

On behalf of The World Association of Technology Teachers

W.A.T.T.



World Association of Technology Teachers

This exercise can be printed and used by teachers and students. It is recommended that you view the website (www.technologystudent.com) before attempting the design sheet.

THESE MATERIALS CAN BE PRINTED AND USED BY TEACHERS AND STUDENTS.

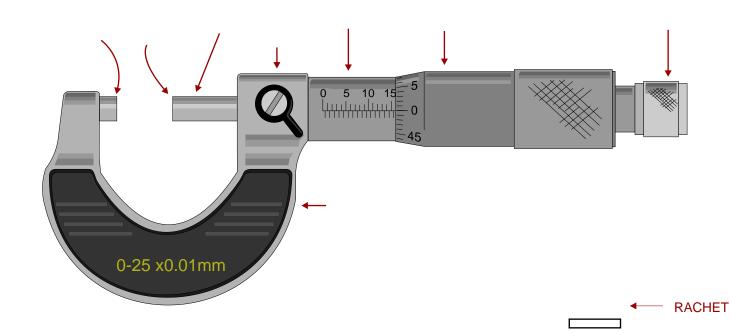
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1. Complete the drawing of the micrometer by adding the names / labels of the various parts.



- 2. Complete the drawing of the depth gauge micrometer shown opposite. Add appropriate colour and shade.
- 3. Below is a description of the depth gauge micrometer and how it is used to measure the depth of a blind hole. Add the missing words to complete the paragraph.

The _____ gauge micrometer is a ____ measuring instrument, used by engineers to measure depths. Each revolution of the ____ moves the spindle face 0.5mm towards the bottom of the blind hole. The diagram below shows how the depth gauge is used. The ratchet is turned ____ until the ____ face touches the bottom of the blind hole. The scales are read in exactly the same way as the scales of a normal micrometer.

rachet clockwise spindle depth precision

SPINDLE SPINDLE FACE

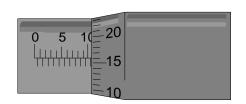
THIMBLE

SLEEVE

4. Work out the micrometer readings on the following sheet. Include calculations/working out.

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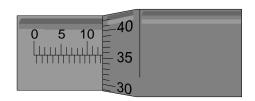


SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT =

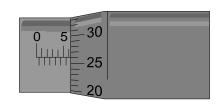


SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT =

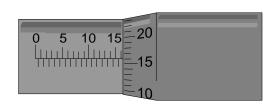


SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT =

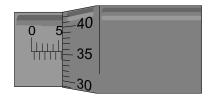


SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT =

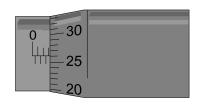


SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT =



SLEEVE READS FULL mm =

SLEEVE READS ½ mm =

THIMBLE READS =

TOTAL MEASUREMENT