

Using Microscopes

Name:

Date:

INQUIRY

Antonie van Leeuwenhoek first saw bacteria in 1676 with a microscope he built himself. What can WE see?

Discuss with your partner. Write your initial ideas below:

Key Vocabulary

Term	Definition
Magnification	How many times larger the image is: eyepiece x objective.
Resolution	Ability to distinguish two close points as separate.

Part A — Microscope Skills

1. Label these parts on a microscope: eyepiece, objective lens, stage, light source, focus wheel. [3 marks]

2. Eyepiece = x10. Objective = x40. Total magnification? [1 marks]

Show your working:

3. A cell appears 2mm under x400 magnification. What is its actual size in micrometres? [2 marks]

Show your working:

Part B — Method

4. Describe how to prepare a slide of onion epidermal cells. Include: cutting, mounting, staining, coverslip. [4 marks]