

W3L1 | Lens detective

Monday | 09:30–10:10 | Introduce | Supported route

Name: _____ Date: _____

Core first. Your teacher will select the questions that fit this lesson. Write, speak, point or dictate your own words. Keep your first attempt so you can improve it.

Your scaffold: Total magnification = eyepiece $\times$ objective. A bigger image is not always a clearer image. Describe what you can see before you explain it.

Work together

Choose $\times 4$ then $\times 40$ objectives with a $\times 10$ eyepiece. Predict the total each time.

1. A $\times 10$ eyepiece is used with $\times 4$, $\times 10$ and $\times 40$ objectives. Calculate the three totals.

2. A blurred image is enlarged. Does it necessarily show two close dots more clearly? Explain.

W3L1 | Continue and improve

Supported route | Use after the core questions when directed

3. **Record your route: real microscope / digital model. Give one observation and one thing this route cannot establish.**

Optional transfer

Why must the specimen be centred before increasing magnification?

Build your response: Point to the evidence. Name the science idea. Link them using “because”. Ask for a visual cue before asking for a worked answer.

Improve the same work

One correction I made, and why:

My request for next time: _____