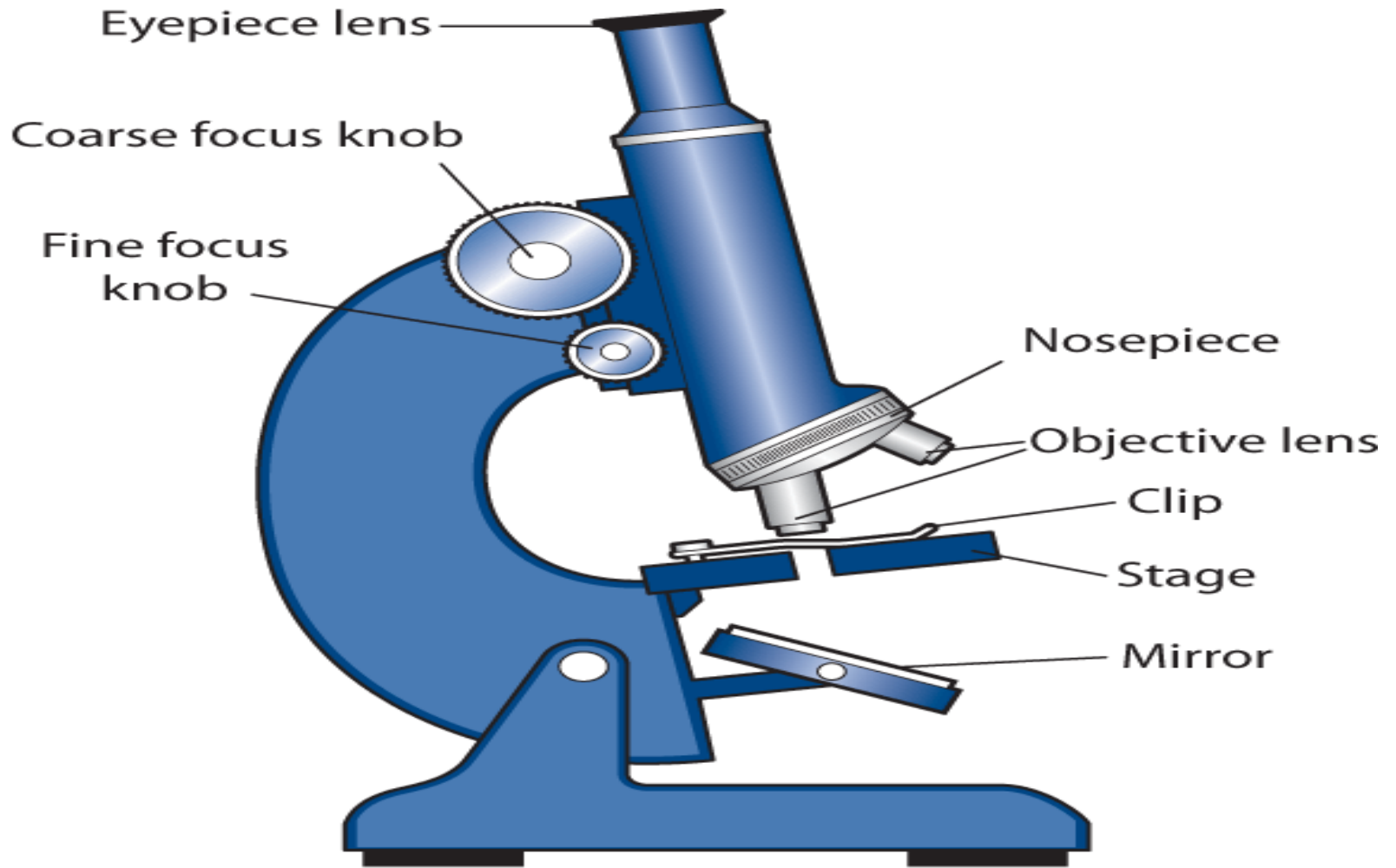


The background of the slide is a vibrant green with a subtle pattern of overlapping hexagons. A white rectangular box is positioned on the right side of the slide, containing the title text. The top portion of this box is a solid dark grey color.

The Microscope



▲ Fig 2.6 A microscope

The Parts of the Microscope

The Eyepiece lens

- This is what you look through
- The eyepiece lens will make the image bigger
- The eyepiece lens has a magnification written on it e.g. X10. This means the image is 10 times bigger

The Focus Knobs

There are 2 Focus knobs:

- **The Coarse Focus Knob**

This brings the image into rough focus

- **The Fine Focus Knob**

This brings the image into precise focus

The Nosepiece

- The Nosepiece can revolve around
- The objective lenses are attached to the nosepiece

The Objective Lenses:

- The Objective lenses are found on the nosepiece
- Each lens has a different magnification written on it e.g. x 40

The Stage:

- The Stage is where the glass slide is placed

The Diaphragm:

- The Diaphragm controls the amount of light shining through the object

The Light Bulb:

- The Light Bulb is the source of light

The Mirror:

- The mirror reflects light from the light bulb up through the object

Total Magnification

Total Magnification is:

The Magnification of the eyepiece lens multiplied by the magnification of the objective lens

○ **Example:**

Eyepiece lens = x 10

Objective lens = x 40

Total Magnification = ?

○ **Answer =**

Eyepiece lens	X	Objective
lens		
10	X	40

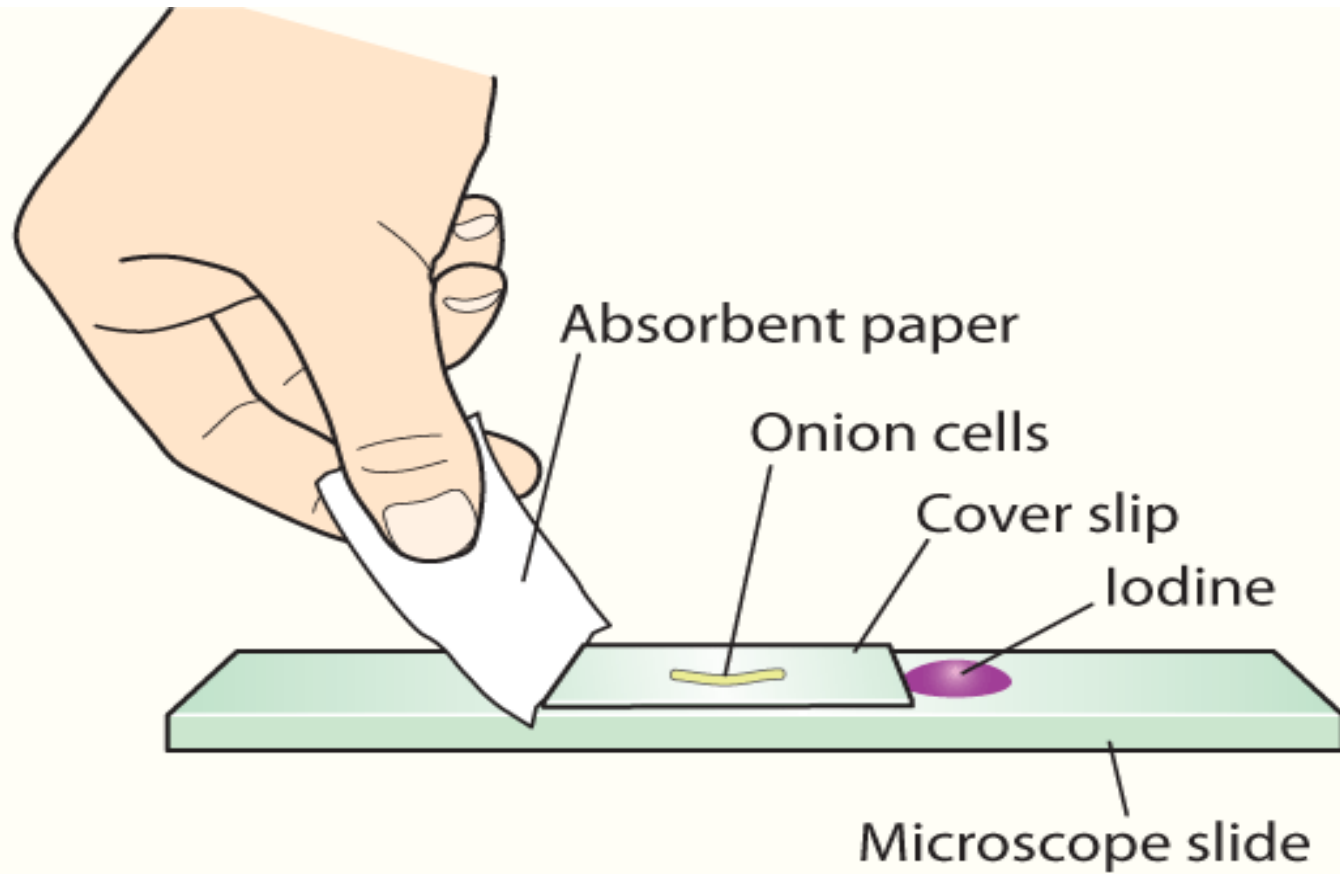
Total Magnification = 400

To prepare and examine an animal cell under a microscope

- Scrape some cells from the side of your mouth using a plastic loop
- Rub the cells onto a glass slide
- Stain them with some Iodine
- Put a cover slip onto the slide
- View under different magnifications of the microscope

To prepare and examine a plant cell under a microscope

- Cut a very thin piece of onion
- Place the thin onion onto a glass slide
- Stain it with some Iodine
- Put a cover slip onto the slide
- View under different magnifications of the microscope



▲ Fig 2.11 Staining onion cells