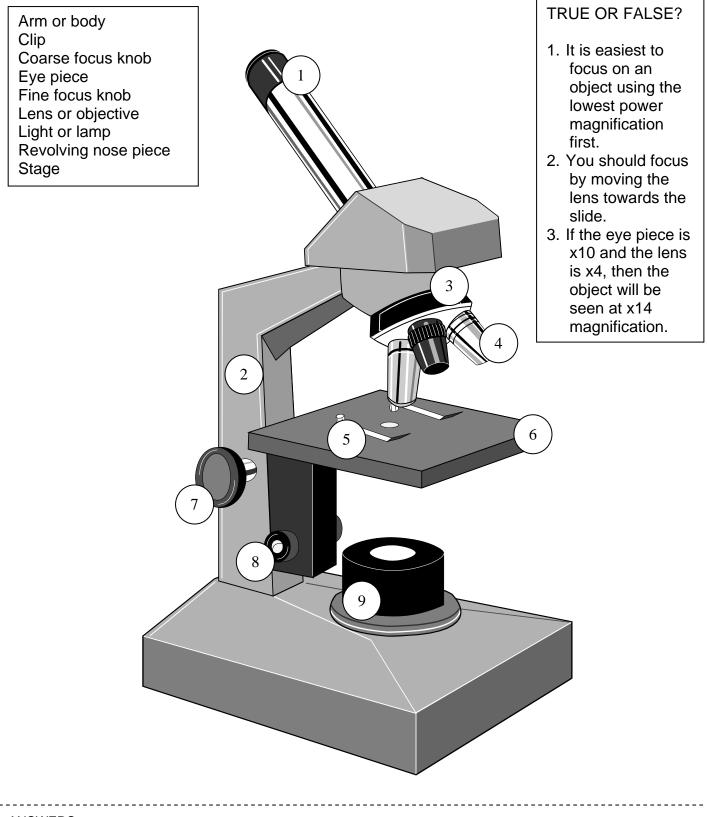
# **MICROSCOPE WORKSHEET**

Label parts 1 - 9 of the microscope using the words provided.



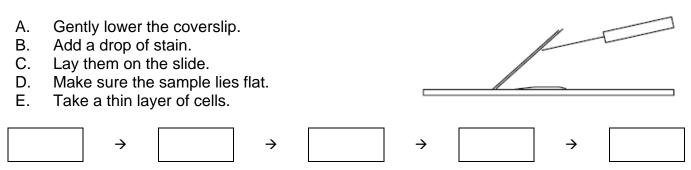
#### ANSWERS

1-eye piece 2-arm or body 3-revolving nose piece 4-lens or objective 5-clip 6-stage 7-coarse focus knob 8-fine focus knob 9-light or lamp

True or False: 1 – true 2 – false 3 – false (it will be x40)

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# Making a slide. (Place statements A – E in the correct order)



### How to use a microscope

the microscope slide \_\_\_\_\_\_ your specimen on it on the stage. the \_\_\_\_\_\_ in place \_\_\_\_\_\_ the clips. Adjust the mirror lamp or turn on the light if this is built in to \_\_\_\_\_\_ microscope. Place the smallest objective lens over the hole in the stage. This is the lowest power magnification lens. Looking from the side of the microscope, turn the coarse focusing \_\_\_\_\_\_ to make the objective lens as close to the stage as \_\_\_\_\_\_ Now look into the eyepiece lens. Turn the coarse \_\_\_\_\_\_ knob until what you see is clear, always moving the stage and lens away from each other. \_\_\_\_\_\_ the object is in focus, use the fine focus to \_\_\_\_\_\_ the \_\_\_\_\_ really clear.

WORD	BANK:	with	focusing	make	and	image	knob	slide	using	
once	possible	the	hold	place						

# QUESTIONS

- 1. How do you put the cover slip on a slide without getting bubbles trapped under it?
- 2. How are air bubbles recognised when viewing a slide?
- 3. When you are focusing on an object, in which order should the three objective lenses always be used? Why?
- 4. When focusing on an object, why do we always start with the objective lens near the specimen and move the lens *away*?
- 5. Which is more powerful: a X10 eye-piece and a X20 objective or a X7 eye-piece and a X40 objective?

\_\_\_\_\_

6. How should a microscope be a) carried safely? b) put away correctly?

#### ANSWERS

Making a slide:  $E \rightarrow C \rightarrow D \rightarrow B \rightarrow A$ 

How to use a microscope: Place the microscope slide with your specimen on it on the stage. Hold the slide in place using the clips. Adjust the mirror and lamp or turn on the light if this is built in to the microscope. Place the smallest objective lens over the hole in the stage. This is the lowest power magnification lens. Looking from the side of the microscope, turn the coarse focusing knob to make the objective lens as close to the stage as possible. Now look into the eyepiece lens. Turn the coarse focusing knob until what you see is clear, always moving the stage and lens away from each other. Once the object is in focus, use the fine focus to make the image really clear.

Questions: 1 – lower it gentle from  $45^{\circ}$  angle to flat using a pencil 2 – large, dark ringed circles 3 – lowest to highest magnification 4 – so that you don't risk smashing the lens into the slide as you try to focus it 5 – x7 and x40 (x280 magnification) 6 – a) with two hands, one on body/arm and one under base b) set lens to low power, cover microscope with bag/cover, wind up any electrical leads.

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