## Quiz 9

Consider the below two-lens situations showing a simple compound microscope and a telescope. For each system display in the drawing how the final image is made. Begin by drawing an upright arrow depicting the actual object under observation. Draw and properly locate/size/orient the image of the objective. Label this image  $\mathbf{OV}$  if it is virtual;  $\mathbf{OR}$  if it is real. Draw and properly locate/size/orient the image of the eyepiece. Label this image  $\mathbf{EV}$  if it is virtual;  $\mathbf{ER}$  if it is real. Check a box reporting the relative size of the focal length of the objective and eyepiece. Mark with  $\bullet$  the focal points (one on each side of the lens) of the objective; mark with  $\nabla$  the focal points of the eyepiece. Note: the eye is placed far right, and the object being viewed is to the left of the objective.

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$\nabla$ the focal points of the eyepiece.	Note: the eye is placed far right, and the object bei	3
the objective.	$f$ : large $\Box$	$f$ :large $\Box$
	small □ 	
Microscope		
	·	
	$f$ :large $\Box$ $\land$ small $\Box$	$f$ :large $_{igsqc}$
Telescope		$\bigvee$