

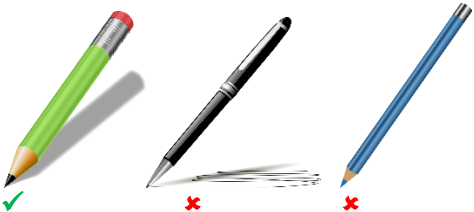
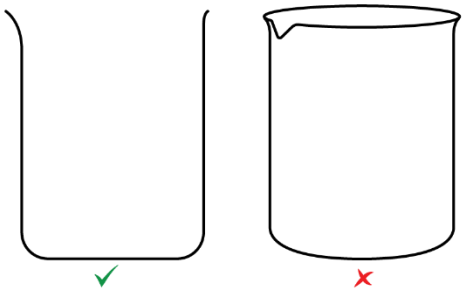
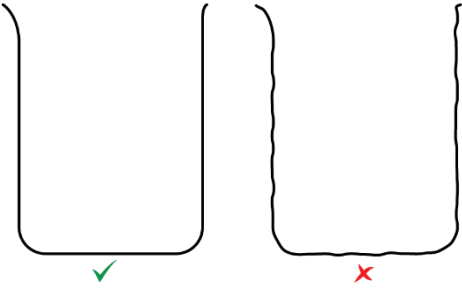
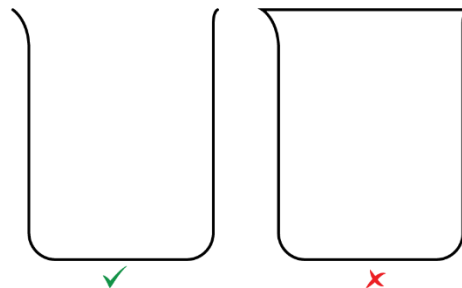
# Drawing Scientifically

## Guided Notes – Student Edition

### What are Scientific diagrams and why do we use them?

Diagrams are commonly used in science to show an experimental \_\_\_\_\_. Therefore, they need to be simple, \_\_\_\_\_ representations of the scientific equipment being used. Scientific diagrams often \_\_\_\_\_ a method and therefore they must be easy to construct and easily interpreted by others. The great thing about scientific diagrams is that they are not meant to look like the '\_\_\_\_\_ ' object, so you do not need to be a good at art to draw them. When drawing scientific diagrams there are several rules which must be followed:

### Rules for scientific drawings:

<p>1. Pencil Only - Use a standard, _____, lead pencil rather than a _____. It should not be _____ or a coloured pencil.</p>	
<p>2. 2D - Drawings should be _____-dimensional rather than _____-dimensional.</p>	
<p>3. Use clean, _____ lines rather than sketching.</p>	
<p>4. Glassware should be _____ – do not close off the _____ of glassware.</p>	

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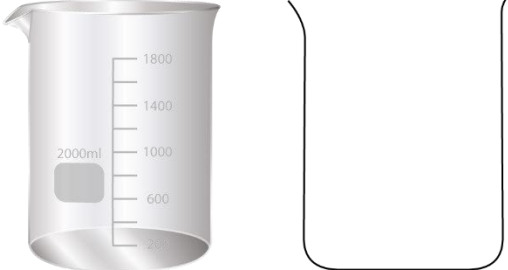

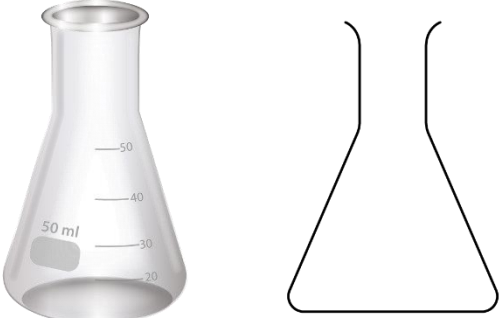

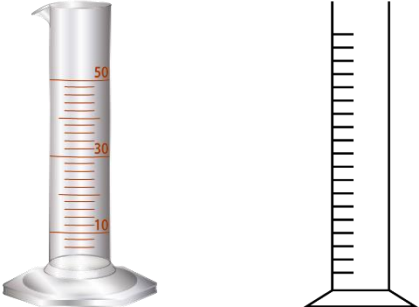

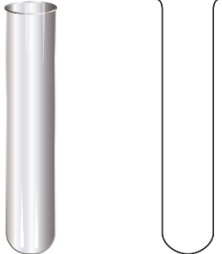
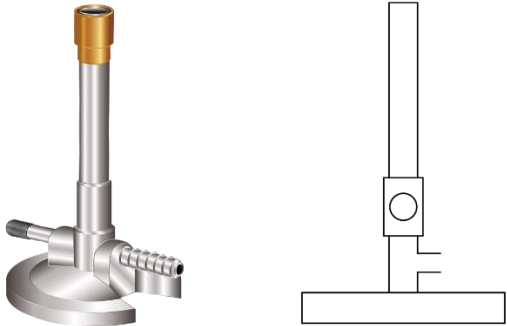
<p>5. Use a _____ – all straight lines should be drawn with a ruler rather than _____.</p>	
<p>6. Outlines only - diagrams need to be _____ and simple, so no coloring or _____ is needed.</p>	
<p>7. Size matters – scientific diagrams should be roughly _____ of a page in size so that all _____ and equipment can be seen.</p>	
<p>8. Accuracy – objects which _____ each other in 'real life' should be touching in the diagram. Objects should not be '_____'. </p>	
<p>9. Labels - Label each piece of equipment with a _____ (ruled) line and no _____. Avoid crossing over lines.</p>	

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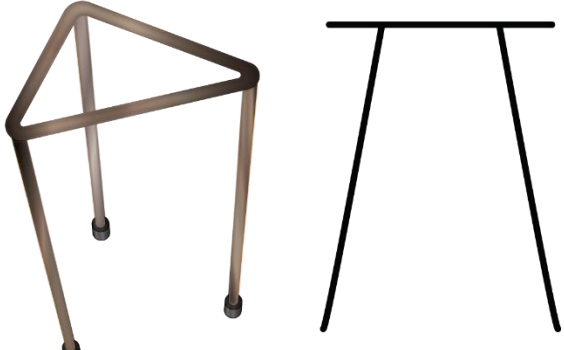
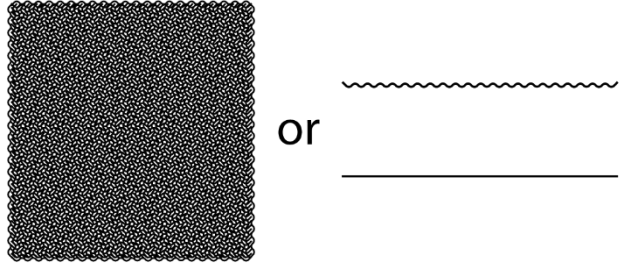


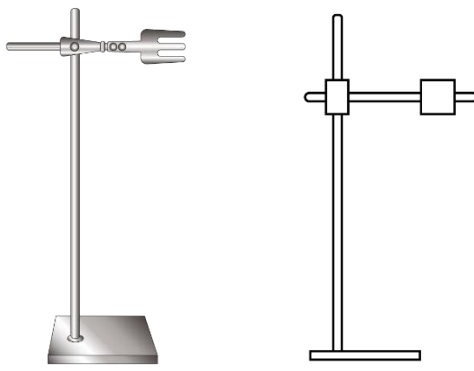
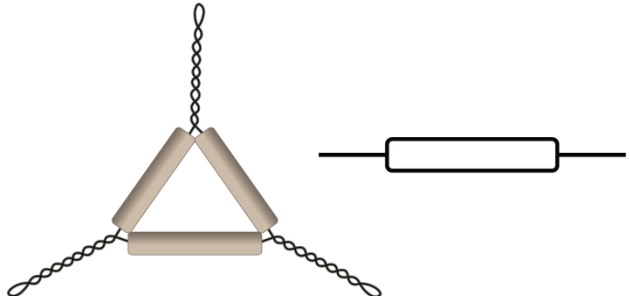
### Drawing Laboratory Equipment

The table below shows each of the common pieces of lab equipment drawn correctly. Use them as a reference to help you learn how to draw each piece of equipment.

<p><b>Beaker:</b></p> 	<p><b>Funnel:</b></p> 
<p><b>Erlenmeyer Flask:</b></p> 	<p><b>Stirring Rod</b></p> 
<p><b>Measuring (graduated) Cylinder</b></p> 	<p><b>Watch Glass</b></p> 
<p><b>Test tube</b></p> 	<p><b>Bunsen Burner</b></p> 

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<p><b>Tripod:</b></p> 	<p><b>Gauze Mat:</b></p> 
<p><b>Evaporating Dish:</b></p> 	<p><b>Crucible:</b></p> 
<p><b>Ring stand, Boss head and Clamp:</b></p> 	<p><b>Clay triangle:</b></p> 
<p><b>Heat proof mat:</b></p> 