



جامعة المستقبل  
AL MUSTAQBAL UNIVERSITY

جامعة المستقبل  
كلية العلوم  
قسم علوم الكيمياء الحياتية

اعداد: م ايلاف علي عبيد

**Analytical chemistry**



## Laboratory tools and their uses Chemistry laboratory tools and their uses:

Chemistry laboratories usually contain specialized tools and devices to help conduct scientific experiments, including the following

**Volumetric flask:** Volumetric flasks are one of the types of glass vessels commonly used in laboratories, which help measure various liquids more accurately than some known measuring vessels.



**Bunsen burner:** Bunsen burners are used to facilitate the combustion process, produce many specific chemical reactions, observe various reactions, and sterilize laboratory instruments.



**Test tubes:** Test tubes are used in many laboratory uses, such as displaying chemicals, preserving them, or transporting them from one place to another. The length of these tubes usually ranges from 7.6 cm to 15.24 cm.

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اسم التدريسي: ايلاف علي عبيد  
اسم ماده : الكيمياء التحليليه

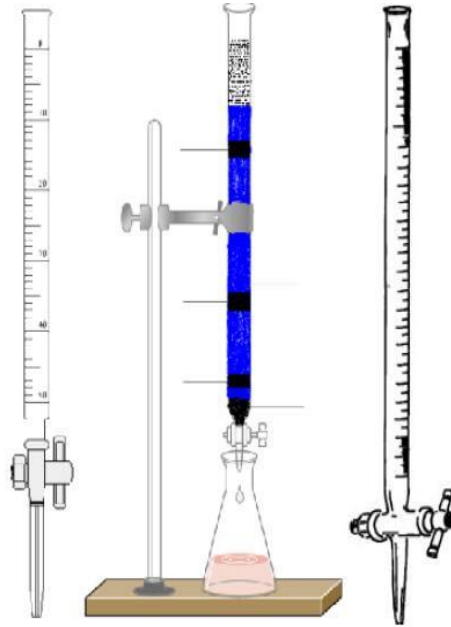


**Graduated cylinder:** Graduated cylinders are a tool for measuring precise volumes of liquids.



**Burette:** The buret is used to determine a specific and precise volume of liquid.

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**Crucible:** The crucible is a tool for carrying chemicals during the heating process to high temperatures.



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**Mortar and pestle:** Mortar and pestle are used to grind and crush chemicals.



**Centrifuge device:** The centrifuge is one of the laboratory devices, which is used to rotate liquid samples to separate the components in them.

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**Fume hood:** ) is used to limit exposure to fumes, and it adopts a ventilation system. In the fume hood, these vapors are discharged to the outside, or filtered, and recycled.



**Spectrophotometer:** The spectrophotometer is used to measure the intensity of light to arrive at the wavelength.



**Pipette:** ) for taking small samples of different liquids accurately and repeatedly. Most pipettes are made of glass, but some are made of plastic. This tool is not subject to exposure to high temperatures or flame, as it can deform and lose its accuracy in measurement.

