

FBQ1: Agitation of a mixture of solution can be achieved using _____.
Answer: *Magnetic stirrer*

FBQ2: To avoid the errors in mass due to the use of balances that are not calibrated, one should weigh by a method called _____.
Answer: *Weighing by difference*

FBQ3: The mass of an empty beaker is 20.1672g; if the mass obtained after sodium trioxocarbonate (iv) was added to the beaker and weighed is 22.7587g, what is the mass of the sodium trioxocarbonate?
Answer: *2.5915g*

FBQ4: _____ is used in the laboratory to separate a mixture of two miscible liquids with different boiling points
Answer: *Distillation*

FBQ5: Flammable solvents in a mixture should be boiled away in a _____.
Answer: *Fume cupboard*

FBQ6: _____ is worn in the laboratory to avoid chemicals splashing into the eyes.
Answer: *Safety goggles*

FBQ7: _____ glassware is used to heat and evaporate liquids.
Answer: *Evaporating dish*

FBQ8: Volumetric glassware is the most _____ method of transferring and delivering liquids
Answer: *Precise and accurate*

FBQ9: To prevent bumping of a hot liquid out of the container, _____ is added.
Answer: *boiling chip*

FBQ10: A metal sphere weighing 19.48g is added to 20ml of water in a graduated cylinder. If the density of the metal is 4.50g/ml, what will be the new level of water in the graduated cylinder?
Answer: *24.33ml*

FBQ11: Reaction requiring low temperature of 00C can be carried out in the laboratory by employing _____.
Answer: *Ice water bath*

FBQ12: _____ are used to crush solids into powders for experiments.
Answer: *Mortar and pestle*

FBQ13: Tongs are used to hold apparatus when they are _____.
Answer: *Hot*

FBQ14: The apparatus below is called _____.
Answer: *Flat bottom flask*

FBQ15: The most basic technique for the purification of organic solids is _____.
Answer: *Recrystallization*

FBQ16: _____ are often used for heating in a chemical laboratory because they have low heat – resistance, they are less subject to thermal stress and are inert.
Answer: *Borosilicate glasses*

FBQ17: Anhydrous compounds are kept dry in a _____.
Answer: *Dessicator*

FBQ18: Desiccant is a _____ agent

Answer: *Drying*

FBQ19: Bunsen burners are used for heating and exposing items to _____.

Answer: *Flame*

FBQ20: Filtration involves the separation of _____ solid materials from a liquid.

Answer: *Insoluble*

FBQ21: An impure substance melt at _____ and over a wider range

Answer: *A lower temperature *

FBQ22: The colour of bromine solution turns alkene compound to _____.

Answer: *Colourless*

FBQ23: The loss of water from a molecule is called _____

Answer: *Dehydration*

FBQ24: A _____ is used to contain/put a small quantity of substance to be heated to a very high temperature?

Answer: *Crucible*

FBQ25: Cycloalkane are called saturated hydrocarbon because of _____

Answer: *single bond*

FBQ26: Domestic scale is a type of _____ weighing scale.

Answer: *Digital*

FBQ27: The balance which display its mass reading in grams to 2 decimal place is called _____.

Answer: *Top loading balance*

FBQ28: _____ type of distillation is based on large number of theoretical vaporization-condensation cycle.

Answer: *Fractional distillation*

FBQ29: Separation techniques involving distillation obey _____ type of law.

Answer: *Raoult's law*

FBQ30: _____ is based on the principle of the equilibrium distribution between two immiscible phases.

Answer: *Extraction*

FBQ31: The object shown above is called _____.

Answer: *Wash bottle*

FBQ32: The mass of a substance divided by the volume of the substance is known as _____.

Answer: *Density*

FBQ33: Vinegar contains a carboxylic acid called _____.

Answer: *Acetic acid*

FBQ34: The temperature of an object/substance can be determined using a _____.

Answer: *Thermometer*

FBQ35: A mixture of sand and water can be separated from each other by Filtration, decantation and _____.

Answer: *Evaporation*

Multiple Choice Questions (MCQs):

MCQ1: The _____ is used in vacuum or suction filtration in order to separate

solids from liquids.
Answer: Evaporating dish

MCQ2: Which of the following is used to hold solids when being weighed or transported?
Answer: Conical flask

MCQ3: During chemical reactions in the laboratory, reagents are stirred so as to _____.
Answer: Mix the reagents or initiate the reaction

MCQ4: _____ is a more accurate weighing balance amongst the options listed below.
Answer: Analytical balance

MCQ5: All of the options below are part of a sample distillation apparatus except _____.
Answer: Heating mantle

MCQ6: _____ is not a laboratory heating device.
Answer: Hot plate

MCQ7: _____ is used for heating solutions up to 100°C and not more.
Answer: Water bath

MCQ8: Which weighing balance will you use if a procedure tells you to weigh the sample accurately?
Answer: Analytical balance

MCQ9: Which of the following separation technique does not give a pure product?
Answer: Simple distillation

MCQ10: The glassware above is used for _____.
Answer: temporary storage

MCQ11: Which of the following will introduce error when weighing an object or substance?
Answer: Placing the weighing balance in a location with low levels of vibration and air current

MCQ12: Liquids are separated from solids with the following except _____.
Answer: Decanting

MCQ13: What would you do if you were to heat a sample in a dish?
Answer: Weigh it immediately

MCQ14: . Most fire in the laboratory can be prevented by the use of _____.
Answer: Extinguisher

MCQ15: The following are the first things to be done when determining the density of an unknown metal cube except _____.
Answer: Weigh the metal cube

MCQ16: Using an unclean volumetric glassware during experiment will _____.
Answer: Slow the rate of the reaction

MCQ17: Amongst the options listed below _____ is a better choice for the heating of flammable substances.
Answer: Evaporating dish

MCQ18: What is the first thing to do when a person inhales vapour of an irritating or toxic substance?
Answer: The person should be taken away immediately to fresh air first

MCQ19: Vaporization and condensation are involved in _____ processes.

Answer: Simple distillation

MCQ20: This apparatus is used for _____.

Answer: For transfer of liquids

MCQ21: Amongst the glassware listed below _____ is the most precise and accurate method of transferring and delivering liquids.

Answer: Medicine droppers

MCQ22: _____ is not a separation technique frequently employed in the laboratory to isolate one or more components from a mixture.

Answer: Recrystallisation

MCQ23: Which of these statement is true?

Answer: Fractional distillation involves one cycle of vapourisation - condensation

MCQ24: A graduated cylinder is filled to the 40.00 ml mark with mineral oil. The masses of the cylinder before and after the addition of mineral oil are 124.966 g and 159.446 g. Determine the density of the mineral oil.

Answer: 34.48 g/ml

MCQ25: _____ amongst the options is not used in gravity filtration?

Answer: Beaker

MCQ26: _____ is not a volumetric glassware.

Answer: Round bottom flask

MCQ27: A chemist would determine several physical and chemical properties of a compound because _____.

Answer: he wants to know more about the compound

MCQ28: Which of the following will you do when a chemical accidentally get into your eye?

Answer: Clean your eye with a clean cloth

MCQ29: Compound A was found to have a higher molecular weight than Compound B. Which of them will have a higher boiling point?

Answer: Compound B

MCQ30: What does a foreign particle do to a crystal lattice?

Answer: It interrupts its uniform structure

MCQ31: Which of these is/are more accurate and precise in taking weight measurements?

Answer: Iron Scale

MCQ32: The process that boil reactant while continually cooling the vapour back to the flask as liquid is called _____.

Answer: Condensation

MCQ33: The type of distillation that shows more precision and efficiency is _____.

Answer: Simple distillation

MCQ34: The commonest type of stirrer used for a reaction mixtures that is very viscous is _____.

Answer: Magnetic stirrer

MCQ35: Which weighing balance will you use if a procedure tells you to weigh about 3g of ammonium sulphate?

Answer: Analytical balance