SNC 1PI Chemistry Laboratory Practical

The Grade 9 Chemistry Lab Practical will be completed during your regularly scheduled Science class on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_in room **508**. THIS IS A MAJOR ASSIGNMENT. If for any reason, you cannot make the lab practical, you must speak with your teacher personally.

The purpose of the Lab Practical is to assess the student’s investigative and laboratory skills based on concepts studied throughout the introduction and chemistry units. The lab practical will consist of two stations, in which an experiment is performed.

**Materials Required for the Practical:** Pencil, eraser**.**

YOU ARE RESPONSIBLE FOR BRINGING YOUR OWN MATERIALS

**Talking or any form of communication with other students during the practical will not be permitted.**

**TOPICS TO STUDY:** Check off each topic that you have studied!

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit** | **Topics** | **Reference** | **✓** |
| **Introduction** | Lab Safety Rules | Note: Lab Safety Rules |  |
| Lab equipment names and functions | Lab Equipment Scavenger Hunt |  |
| **Chemistry** | How to describe physical and chemical properties (colour, clarity, lustre, solubility, malleability, combustibility, etc) | Note: Properties of Matter |  |
| How to identify physical and chemical changes (know clues to look for) | Note: Physical and Chemical Changes |  |
| Classifying Matter (heterogeneous mixture, homogeneous mixture, element, compound) | Note: Classification of Matter Activity: Classification of Matter Activity |  |

SNC 1P - Lab Exam Practice Questions (Intro, Chemistry)

1. Review lab equipment (name, diagram and function). For the following pieces of equipment state the name and function.

|  |  |  |  |
| --- | --- | --- | --- |
| Equipment: | http://www.fotosearch.com/bthumb/ICL/ICL160/TEC_143C.jpg |  | [See full size image](http://www.biconet.com/testing/GIFs/porcelainSpot2.jpg) |
| Name: | ***Test tube and test tube rack*** | ***Beaker*** | ***Spot plate*** |
| Function: | ***To hold, observe or react small amounts of chemicals*** | ***To hold, observe, mix or react chemicals together*** | ***To observe, hold or react small amounts of chemicals*** |
| Equipment: |  |  |  |
| Name: | ***Stirring rod*** | ***Graduate Cylinder*** | ***Scoopula*** |
| Function: | ***To mix chemicals together*** | ***To measure a volume of liquid in mL*** | ***To scoop up chemicals*** |

1. List four safety rules for the lab.

***Wear goggles, don’t taste/touch/smell chemicals in the lab, tie long hair back, avoid sudden movement, keep your work area clean, know the precautions for the chemicals that you are working with etc.***

1. Describe sugar by listing eight physical properties for it.

***White, solid, lustrous, clear, crystal form, brittle, dissolves in water, odourless***

1. List two chemical properties for magnesium.

***Reacts with acid, bright light is released when heated***

1. Explain the difference between a chemical change and a physical change.

***In a chemical change something new is made***

1. List the four clues that indicate a chemical change has occurred.
   * + 1. ***heat/light is given off***
       2. ***precipitate***
       3. ***new colour***
       4. ***bubbles of gas***
       5. ***new smell***
2. Give three examples of a physical change.
   * + 1. ***dissolving***
       2. ***change of state (s, l, g)***
       3. ***change of shape/form***
3. Fill in the table indicating if the change is physical or chemical.

|  |  |  |
| --- | --- | --- |
| Description | **Type of Change** | **Clue** |
| burning a log | chemical | heat or light given off |
| sawing a log | ***P*** | ***change of shape*** |
| dissolving orange juice crystals | ***P*** | ***dissolving*** |
| melting snow | ***P*** | ***change of state*** |
| mixing vinegar and baking soda | ***C*** | ***bubbles of gas*** |
| digesting food | ***C*** | ***heat is given off, bubbles of gas, change of colour*** |
| cooking bacon | ***C*** | ***change of colour*** |
| defrosting bacon | ***P*** | ***change of state*** |

1. Fill in the following chart:

|  |  |  |
| --- | --- | --- |
| ***Substance:*** | ***Pure Substance or Mixture*** | ***Element, Compound, Heterogeneous or Solution*** |
| Chili | ***mixture*** | ***heterogeneous*** |
| Pure Water | ***pure substance*** | ***compound (H2O)*** |
| Oxygen | ***pure substance*** | ***element*** |
| Tap Water | ***mixture*** | ***homogeneous*** |