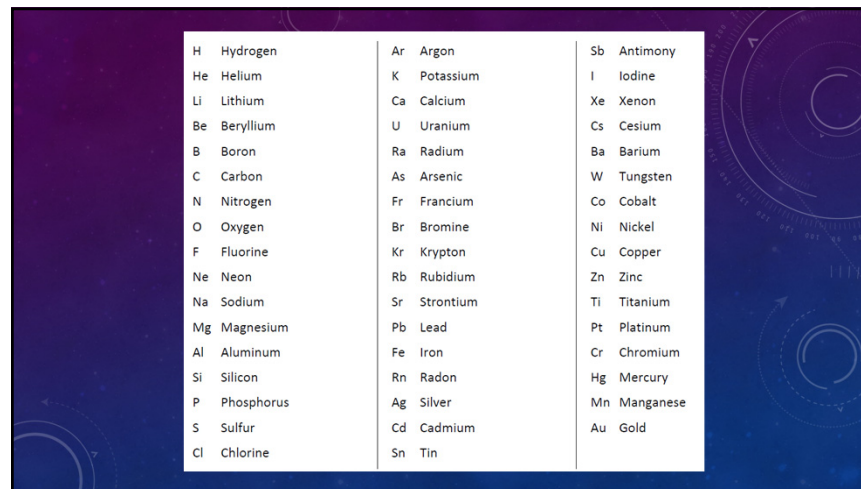


CHEMISTRY 110

TODAY

EXPERIMENT 1
TURN IN EXERCISE A
ELEMENTS QUIZ

1



H Hydrogen	Ar Argon	Sb Antimony
He Helium	K Potassium	I Iodine
Li Lithium	Ca Calcium	Xe Xenon
Be Beryllium	U Uranium	Cs Cesium
B Boron	Ra Radium	Ba Barium
C Carbon	As Arsenic	W Tungsten
N Nitrogen	Fr Francium	Co Cobalt
O Oxygen	Br Bromine	Ni Nickel
F Fluorine	Kr Krypton	Cu Copper
Ne Neon	Rb Rubidium	Zn Zinc
Na Sodium	Sr Strontium	Ti Titanium
Mg Magnesium	Pb Lead	Pt Platinum
Al Aluminum	Fe Iron	Cr Chromium
Si Silicon	Rn Radon	Hg Mercury
P Phosphorus	Ag Silver	Mn Manganese
S Sulfur	Cd Cadmium	Au Gold
Cl Chlorine	Sn Tin	

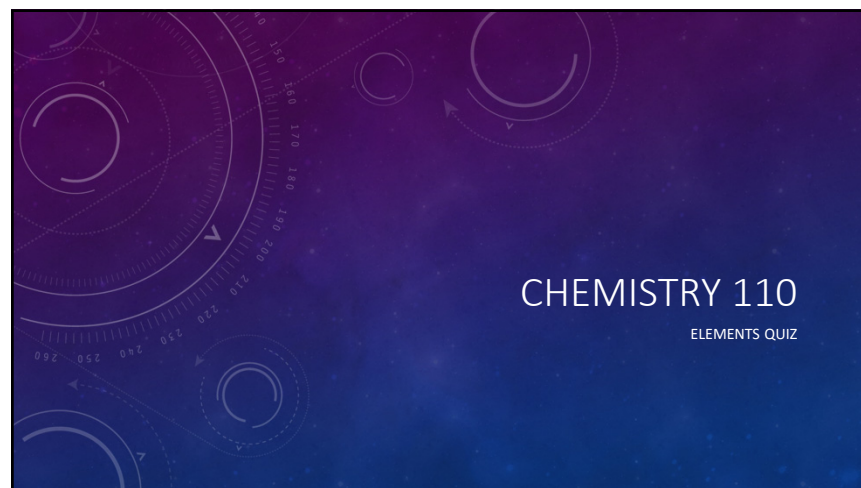
2



AVAILABLE LOCKERS

3	50	104	151
14	61	115	165
25	75	129	176
37	86	141	187

3



CHEMISTRY 110

ELEMENTS QUIZ

4

Fe

1

5

Francium

2

6

K

3

7

Calcium

4

8



Hg

5

9



Silver

6

10



Mn

7

11



Sodium

8

12

As

9

13

Platinum

10

14

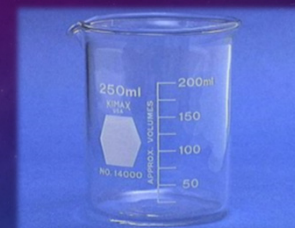
CHECK IN

I WILL NEED ALL THE PAPERS BACK EXCEPT FOR THE TOP OF THE SAFETY SHEET

15

BEAKER

Beakers hold solids or liquids that will not release gases when reacted or are unlikely to splatter if stirred or heated.



16

BEAKER TONGS



Beaker tongs are used to move beakers containing hot liquids

17

BUNSEN BURNER

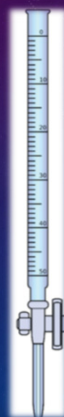


Bunsen burners are used for the heating of nonvolatile liquids and solids.

18

BURET

Burets are used for titration and are long graduated pieces of glass



19

BURET CLAMP

Buret clamps are used to burets – long graduated tubes used in titration.



20

CLAY TRIANGLE

The clay triangle is used as a support for crucibles when being heated over a Bunsen burner.



21

CRUCIBLE



Crucibles are used for heating certain solids, particularly metals, to very high temperatures.



22

CRUCIBLE TONGS

For handling hot crucibles; also used to pick up other hot objects. **NOT** to be used for picking up beakers!



23

ERLENMEYER FLASK



Erlenmeyer flasks hold solids or liquids that may release gases during a reaction or that are likely to splatter if stirred or heated.

24

EVAPORATING DISH



The evaporating dish is used for the heating of stable solid compounds and elements.

25

FORCEPS

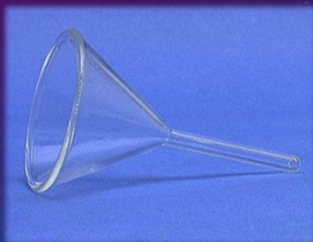


Forceps (or tweezers) are used to pick up small objects.

26

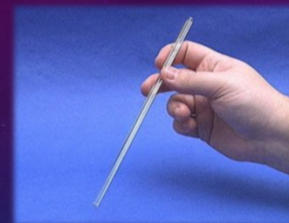
FUNNEL

A funnel is used to aid in the transfer of liquid from one vessel to another.



27

GLASS STIR ROD



A glass rod is used to manually stir solutions. It can also be used to transfer a single drop of a solution.

28

GRADUATED CYLINDER

A graduated cylinder is used to measure volumes of liquids.



29

HOT HAND

Hot hands are used to move beakers containing hot liquids



30

PIPETTE

A pipette is used to transfer a small volume of liquid (less than one mL).



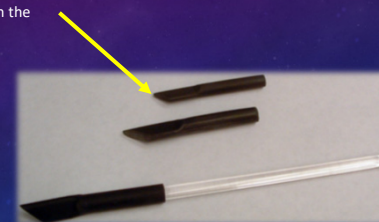
On top of some pipettes are a "rubber bulb"



31

RUBBER POLICEMAN

Rubber policemen are used on glass stirring rods to assist in the movement of materials

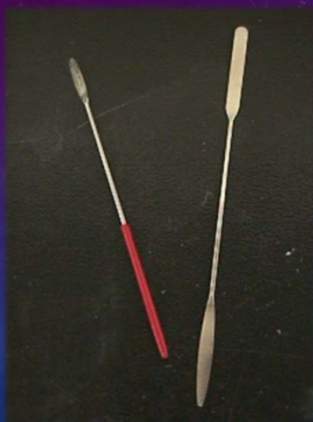


32

SPATULAS

Spatulas are used to dispense solid chemicals from their containers.

Chemicals should never be transferred with your bare hands.



33

STRIKERS

Strikers are used to light Bunsen burners.

The flints on strikers are expensive. Do not operate the striker repeatedly just to see the sparks!



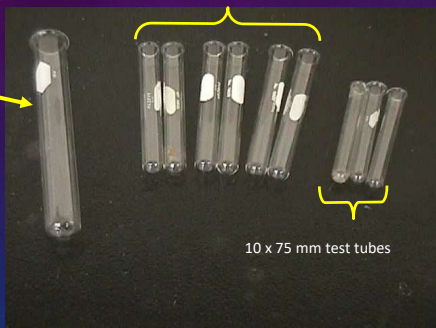
34

TEST TUBES

18 x 300 mm
test tube

13 x 100 mm test tubes

10 x 75 mm test tubes



35

TEST TUBE BRUSHES

Test tube brushes are used to clean test tubes and graduated cylinders.

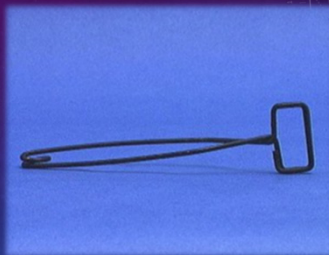
Forcing a large brush into a small test tube will often break the tube.



36

TEST TUBE HOLDER

A test tube holder is useful for holding a test tube which is too hot to handle.



37

TEST TUBE RACKS



Test tube racks are for holding and organizing test tubes on the laboratory counter. Plastic racks may melt in contact with very hot test tubes.

38

RING STANDS

Ring Stands are a safe and convenient way to perform reactions that require heating using a Bunsen burner.



39

IRON RINGS

Iron rings connect to a ringstand and provide a stable, elevated platform for the reaction.



40

UTILITY CLAMPS

Utility clamps are used to secure test tubes, distillation columns, and burets to the ringstand.



41

RUBBER STOPPERS

Rubber stoppers are used to close containers to avoid spillage or contamination.



Containers should never be heated when there is a stopper in place.

42

SPOT PLATES

Spot plates are used when we want to perform many small scale reactions at one time. We will use these many times during the year.



43

WATER BOTTLE

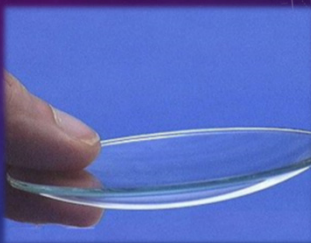
A water bottle has a spout that delivers a wash solution to a specific area. Distilled water is the only liquid that should be used in a wash bottle.



44

WATCH GLASS

A watch glass is used to hold a small amount of solid, such as the product of a reaction.



45

WIRE GAUZE

Wire gauze sits on the iron ring to provide a place to stand a beaker.

On older wire gauze, the white material is asbestos!



46

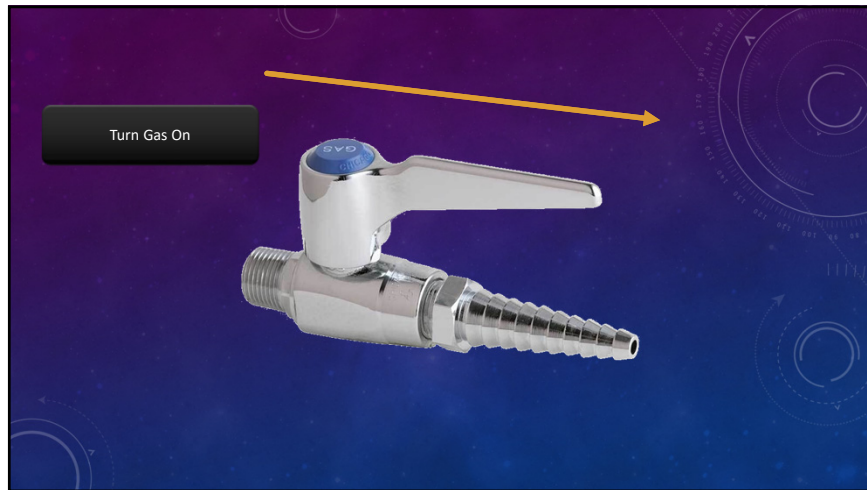
BUNSEN BURNER

FIRE!!!

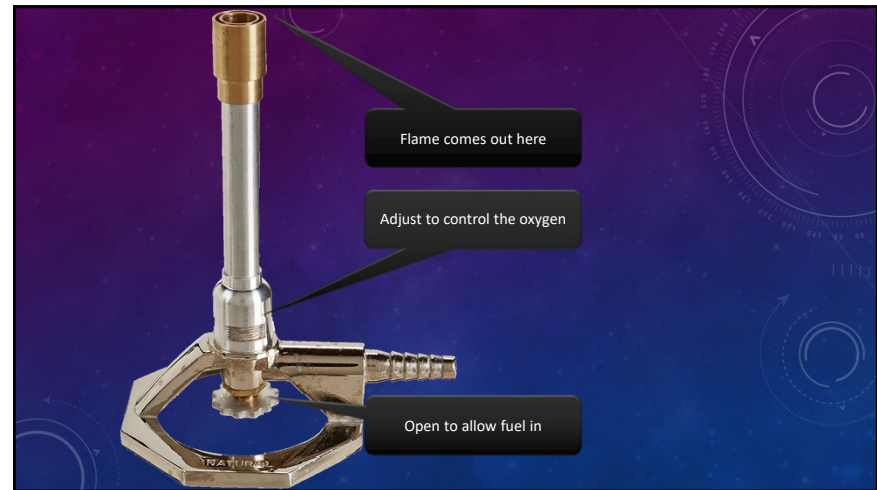


47

48



49



50



51