Minerals with a**Nonmetallic Luster** (glassy, pearly, earthy, transparent)

***Mineral***

***(formula)***

Bauxite

(mixture of hydrous Al

oxides)

Gypsum

(CaSO4·2H20)

Muscovite

(KAl3Si3010

(OH)2)

Halite (NaCl)

Calcite

(CaCo3)

Flourite (CaF2)

***Color***

Gray, red,

white, brown

Colorless,

gray,

white, brown

White, light

gray,

yellow,

rose, green

Colorless,

red, white,

blue

Colorless,

white, pale

tints

Colorless,

white, blue.

Green.

Red,

yellow,

***Streak***

Gray

White

Colorless

Colorless

Colorless.

White

Colorless

***Hardness***

1-3

2

2.5

2.5

3

4

***Density***

***(g/mL)***

1.0 - 3.0

1.0 - 3.0

1.0 - 3.0

1.0 - 3.0

1.0 - 3.0

2.0 - 4.0

***Crystal System***

None

Monoclinic

Monoclinic

Cubic

Hexagonal

Cubic

***Breakage***

None

Cleavage

Cleavage

Cleavage

Cleavage

Cleavage

***Uses***

Source of

aluminum, used

in paints

Used in

preparation of

Plaster of Paris,

dry wall for

building

Used as an

insulator in

electrical

equipment

Salt, very soluble

in water; a

preservative

Fizzes when HCl

is added; frequently florescent

Some are

fluorescent, used

in making steel

Orthoclase

(KAlSi308)

purple

Colorless,

white to

gray,

green, yellow

Colorless

6

1.0 - 3.0

Monoclinic

Cleavage 2 planes meet at

90º

Different types make up over 60% of Earth's

crust;

manufacturing of

ceramics

Augite

(Ca(Mg,Fe,Al)

(AlSi)206

Quartz (SiO2)

Dark green

to black

Colorless,

various

colors

Colorless

Colorless

6

7

2.0 - 4.0

1.0 - 3.0

Monoclinic

Hexagonal

Cleavage

Fracture

Found in igneous

rocks; square or

8 - sided

Used in glass

manufacture,

electronic equipment

Garnet

(Mg,Fe,Ca)3

(Al2Si3O12)

Corundum

(Al2O3)

Red,

brown, black, Ggeen

Colorless,

blue,

brown, green, white, pink

Colorless

Colorless

7.5

9

2.0 - 4.0

3.0 - 5.0

Cubic

Hexagonal

Fracture

Fracture

Used in jewelry;

a birthstone

Transparent

crystals used as gems called ruby

red, sapphire blue, abrasive

MINERAL IDENTIFICATION CHART

Use this chart after all identification tests to determine your mineral!

Minerals with a**Metallic Luster** (looks like a metal)

***Mineral***

***(formula)***

***Color***

***Streak***

***Hardness***

***Density***

***(g/mL)***

***Crystal System***

***Breakage***

***Uses***

Pencil

Graphite

(C)

Galena

(PbS)

Pyrite (FeS2)

Black to

gray

Gray

Light,

brassy yellow

Black to

gray

Gray to

black

Greenish

black

1-2

1-2

6.5

1.0 - 3.0

6.0 - 8.0

4.0 - 6.0

Hexagonal

Cubic

Cubic

Cleavage

Cleavage

Fracture

lead,

Battery

poles

Source of lead, Used in pipes, fishing sinkers

Source of iron, "fool's gold"