

Name:

Period:

Seat#:

Directions: Any worksheet that is labeled with an * means it is suggested extra practice. We do not always have time to assign every possible worksheet that would be good practice for you to do. You can do this worksheet when you have extra time, when you finish something early, or to help you study for a quiz or a test. If and when you choose to do this Extra Practice worksheet, please do the work on binder paper. You will include this paper stapled into your Rainbow Packet when you turn it in, even if you didn't do any of this. We want to make sure we keep it where it belongs so you can do it later if you want to (or need to). If you did the work on binder paper you can include that in your Rainbow Packet after this worksheet. If we end up with extra class time then portions of this may turn into required work. If that happens you will be told which problems are turned into required. Remember there is tons of other extra practice on the class website...and the entire internet! See me if you need help finding practice on a topic you are struggling with.

Identify each as either a chemical or a physical change

| | | | |
|---------------------------------------|---|---|-------------------------------|
| 1) Burning a log | 2) Bending a wire of Aluminum | 3) Boiling water | 4) Melting copper |
| 5) Water evaporating from sugar water | 6) Digesting your lunch | 7) Grinding sand | 8) freezing water to make ice |
| 9) Water is absorbed by a paper towel | 10) A piece of Li is dropped into water and catches fire producing LiOH | 11) A pellet of sodium hydroxide is sliced in two | 12) Salt dissolves in water |
| 13) Milk sours | 14) zinc reacting with hydrochloric acid producing a gas | 15) Iron rusting | 16) A decaying tree trunk |

Identify each as either a chemical or physical property

| | | | |
|-----------------|------------------------------|------------------------|---------------|
| 17) Magnetic | 18) Red color | 19) Dissolves in water | 20) Density |
| 21) Malleable | 22) Reacts violently with Na | 23) Soluble in alcohol | 24) Mass |
| 25) Temperature | 26) Length | 27) Odor | 28) Flammable |

Identify each as either a pure substance, homogeneous mixture, or heterogeneous mixture

| | | | |
|-----------------------------------|----------------------------|----------------------|---|
| 29) Salami | 30) Dirt | 31) A burrito | 32) Iron filings |
| 33) Steam | 34) Pepsi | 35) Italian Dressing | 36) The gas inside a balloon blown up by mouth |
| 37) Salt water | 38) Silver | 39) Chicken soup | 40) The gas inside a balloon filled with helium |
| 41) Graphite in a pencil (carbon) | 42) Orange juice with pulp | 43) Kool-aid | 44) Blood |

Fill in the missing items in a table like the one below

| | Name | Symbol | Z, A, # p, # e, # n | Isotopic Symbol |
|-----|---------------------------|-----------------|---------------------|-----------------|
| 45) | | P ³⁻ | | |
| 46) | Iron | | | |
| 47) | | | #p = 53 | |
| 48) | Silver | | | |
| 49) | | | Z = 36 | |
| 50) | | W | | |
| 51) | Magnesium Ion (+2 charge) | | | |
| 52) | | | #p = 2 | |
| 53) | | Mn | | |
| 54) | Bromine | | | |