Activity 4: Characteristic Properties

Use the table of characteristic properties and the descriptions to determine the identity of these mystery metals:

Property	Aluminum	Iron	Gold	Nickel
Density	2.70	7.87	19.3	8.90
Melting Point	660 °C	1538 °C	1064 °C	1455 °C
Thermal conductivity	237	79	315	91
Electrical conductivity	62%	17%	76%	22%
Magnetism	no	yes	no	yes

1. Mystery Metal A is not magnetic and is the best conductor of both thermal and electrical energy:
2. Mystery Metal B is the least dense,is not magnetic, and melts the fastest:
3. Mystery Metal C is attracted to a magnet and would be a liquid by 1500 °C:
4. Mystery Metal D has the highest melting point and is the worst conductor of electricity:

Activity 5: Kinds of Changes

1. In a _____ change, you change how a substance looks or feels, but not what it is.
2. In a _____ change, you turn something into an entirely new substance with its own unique properties.

Identify the type of change- Physical or Chemical?

1.	Water boiling	P	C	6.	Dissolving Kool Aid in water	P	C
2.	Baking a cake	P	C	7.	Bike chain rusting	P	C
3.	Lighting a candle	P	C	8.	A firework exploding	P	C
4.	Banana turning brown	P	C	9.	Boiling water for tea	P	C
5.	Crushing a can	P	C	10.	Digesting food	P	C

List at least 6 clues that can help you determine if a Chemical Change may have occurred:

1.
2.
3.
4.
5.
6.

LIVEWORKSHEETS