

2.3 Prop & Changes of Matter

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

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

Activity 5: Kinds of Changes

- In a _____ change, you change how a substance looks or feels, but not what it is.
- 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:

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