Date:

Name:

Elemental Conductivity Math Worksheet Answers

Metal	Conductivity X 10 ⁵ (Ω cm) ⁻¹
Aluminum, Al	3.65
Calcium, Ca	2.78
Copper, Cu	5.88
Gold, Au	4.55
Iron, Fe	1.02
Lead, Pb	0.48
Magnesium, Mg	2.33
Manganese, Mn	0.072
Mercury, Hg	0.10
Molybdenum, Mo	1.89
Nickel, Ni	1.43
Platinum, Pt	0.96
Plutonium, Pu	0.070
Silver, Ag	6.21
Sodium, Na	2.11
Tin, Sn	0.91
Titanium, Ti	0.23
Tungsten, W	1.89
Uranium, U	0.39
Zinc, Zn	1.69

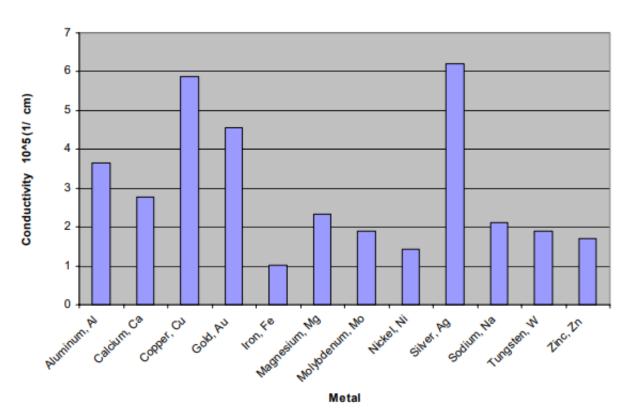
The table below lists some familiar metals and gives their conductivities.

- 1. Which of the metals listed above is the worst conductor? What is its conductivity? **Plutonium**, **Pu (0.070 x 10⁵)**
- Which of the metals listed above is the best conductor? What is its conductivity? Silver, Ag (6.21 x 10⁵)
- List below the six best conductors from the table in order from the metal with the lowest conductivity to the metal with the highest conductivity.
 Magnesium, Mg (2.33 x 10⁵), Calcium, Ca (2.78 x 10⁵), Aluminum, Al (3.65 x 10⁵), Gold, Au (4.55 x 10⁵), Copper, Cu (5.88 x 10⁵), Silver, Ag (6.21 x 10⁵)
- What is the mode of the conductivity data?
 1.89



Date:

5. In the space below, draw a bar graph showing the conductivities for all the metals with a conductivity greater than 1 x 10^5 (Ω cm)⁻¹.



Conductivities for Metals With a Conductivity Greater Than 1 X 10^5 ($1/\Omega$ cm)

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