

Student Activity Sheet 1-6 Electrical Prefixes

Name: _____

Score _____

- In this activity, you will become familiar with the prefixes commonly used in electrical trade. The prefixes are important to know and understand since values are often read or spoken using them. For example, a technician may write “40 kV” rather than 40,000 volts.

Prefix	Symbol	Decimal Equivalent	Power of Ten
tera	T	1,000,000,000,000	10^{12}
giga	G	1,000,000,000	10^9
mega	M	1,000,000	10^6
kilo	k	1,000	10^3
Standard unit		1	
milli	m	.001	10^{-3}
micro	μ	.000 001	10^{-6}
nano	n	.000 000 001	10^{-9}
pico	p	.000 000 000 001	10^{-12}

Express the values on the left as an equal quantity on the right using the metric prefix

- 10,000 volts = _____ kV
- 25,000,000 volts = _____ MV
- 500 volts = _____ kV
- 0.050 amps = _____ mA
- 1.2 A = _____ mA
- 0.0005 A = _____ mA
- 2000 ohms = _____ k Ω

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8. 12,500 ohms = _____ $k\Omega$
9. 122,000 ohms = _____ $M\Omega$
10. 4.5 $k\Omega$ = _____ $M\Omega$
11. 0.025 mA = _____ μA
12. 0.000005 A = _____ μA
13. 0.5kV = _____ V
14. 25 μV = _____ V
15. 500 μA = _____ mA
16. 23 MV = _____ kV
17. 2.2 $k\Omega$ = _____ Ω
18. 2,000,125 Ω = _____ $k\Omega$
19. 3.15 $k\Omega$ = _____ Ω
20. 50 mA = _____ A

