## Engineering Prefixes (31:00)

State the purpose of engineering notation.

List the prefixes and abbreviations associated with $10^{3}, 10^{6}, 10^{9}$, and $10^{12}$.

Express 560,000V in proper engineering format.

Express 560,000,000V in proper engineering format.

Express $10,000,000 \Omega$ in proper engineering format.

Use this overlay to place the following numbers in proper engineering format.

```
2200\Omega
34500V
1500000W
```

Place the following numbers in proper engineering format.

```
2450000W
9100000 000\Omega
3600000000000J
2000m
```

Evaluate the following expressions featuring negative exponents:

$$
\begin{aligned}
& 2^{-1} \\
& 2^{-2} \\
& 2^{-3}
\end{aligned}
$$

List the prefixes and abbreviations associated with $10^{-3}, 10^{-6}, 10^{-9}$, and $10^{-12}$.

List the most common engineering prefixes and abbreviations.

Express .00002A in proper engineering format.

Express . 000000000033 F in proper engineering format.

Use this overlay to place the following numbers in proper engineering format.

```
.120H
.000002 2 C
.03A
.0000000015 F
```

Place the following numbers in proper engineering format.

```
4200000 Hz
.0345 A
.00004 F
208 V
10000000000 W
5700 Wh
.000000000630 C
34000000000000 J
. }000000001\textrm{m
```

Place these entries in proper engineering format and arrange them in sequence.
33,000Z
23,800,000Z
$24 Z$
$0.196 Z$
8,700,000,000Z
$0.047 Z$
$0.000047 Z$
2,840,000,000,000Z
$0.000000000022 Z$

