

Dakota STEP
Science Formula Sheet

Equation

Variables

$$v = \frac{d}{t}$$

v = velocity
d = displacement
t = time interval

$$W = F \times d$$

W = work
F = force
d = displacement

$$P = \frac{W}{t}$$

P = power
W = work
t = time interval

$$a = \frac{\Delta v}{\Delta t}$$

a = acceleration
 Δv = change in velocity
 Δt = change in time

$$F = ma$$

F = force
m = mass
a = acceleration

$$PE = mgh$$

PE = gravitational potential energy
m = mass
g = acceleration due to gravity
h = height

$$KE = \frac{1}{2}mv^2$$

KE = kinetic energy
m = mass
v = velocity

$$v = \lambda f$$

v = wave velocity
 λ = wavelength
f = frequency

$$I = \frac{V}{R}$$

I = current
V = potential difference
R = resistance