

## SIMPLE HARMONIC MOTION (SHM) and RESONANCE

SHM with friction is called DAMPED HARMONIC MOTION.

Friction gradually transforms the mechanical energy of the oscillator into thermal energy.

In DRIVEN HARMONIC MOTION, energy is added to an oscillator by a PERIODIC DRIVING FORCE.

When the DRIVING FREQUENCY matches the NATURAL FREQUENCY of the oscillator, small forces can produce large amplitudes of vibration; this phenomenon is called RESONANCE.