

# Radioactive decay rates

Decays per second,  
or “activity”

$$\frac{\Delta N}{\Delta t} = -\lambda N$$

No. of nuclei  
present

decay constant

## Preflight 27.8

If the number of radioactive nuclei present is cut in half, how does the activity change?

- 1) It remains the same
- 2) It is cut in half
- 3) It doubles