

Root Decoding Challenge Answer Key

Sample Responses:

1. **Thermodynamics** - Roots: *therm* (heat), *dyn* (power); meaning: science of heat and energy movement.
2. **Autonomous** - Roots: *auto* (self), *nom* (law); meaning: self-governing or independent.
3. **Photosynthesis** - Roots: *photo* (light), *synth* (put together); meaning: process by which plants make food from light.
4. **Bibliophile** - Roots: *biblio* (book), *phil* (love); meaning: a person who loves books.
5. **Geocentric** - Roots: *geo* (earth), *centr* (center); meaning: having Earth as the center.
6. **Microscopic** - Roots: *micro* (small), *scop* (see); meaning: too small to be seen without magnification.
7. **Chronometer** - Roots: *chron* (time), *metr* (measure); meaning: a precise instrument for measuring time.
8. **Hydraulic** - Roots: *hydr* (water), *aul* (pipe); meaning: operated by water or fluid pressure.
9. **Telepathy** - Roots: *tele* (distant), *path* (feeling); meaning: communication of thoughts or feelings over distance.
10. **Magnanimous** - Roots: *magn* (great), *anim* (spirit); meaning: generous or noble in spirit.

Teacher's Guide

- **Differentiation:**
 - Grades 8-9: Provide a root meaning reference list for support.
 - Grades 10-12: Remove scaffolds—students must deduce meanings without prompts and use words in original sentences.
- **Extension Idea:** Use the activity as a warm-up before reading challenging texts in science, social studies, or literature.