

Word Detective Files Answer Key

1. **Photosynthesis** - Prefix: *photo* (light) | Root: *synth* (put together) | Suffix: *-esis* (process) → *The process of putting together using light*
2. **Autonomous** - Prefix: *auto* (self) | Root: *nom* (law) | Suffix: *-ous* (full of) → *Self-governing or independent*
3. **Geothermal** - Prefix: *geo* (earth) | Root: *therm* (heat) | Suffix: *-al* (related to) → *Related to heat from the Earth*
4. **Hydraulic** - Prefix: *hydr* (water) | Root: *aul* (pipe) | Suffix: *-ic* (pertaining to) → *Operated by water pressure*
5. **Telecommunication** - Prefix: *tele* (far) | Root: *communic* (share) | Suffix: *-ation* (process) → *The process of sharing information over long distances*
6. **Microscope** - Prefix: *micro* (small) | Root: *scop* (see) | Suffix: *-e* (noun ending) → *An instrument for seeing small things*
7. **Bilingual** - Prefix: *bi* (two) | Root: *lingu* (language) | Suffix: *-al* (pertaining to) → *Able to speak two languages*

Teacher's Guide

- **Focus Skill:** Morphological analysis - students learn to **decode complex academic words** by identifying morphemes (prefix, root, suffix).
- **Differentiation Tips:**
 - For younger learners: Choose simpler words (e.g., *transport*, *preview*, *rebuild*).
 - For advanced learners: Include **scientific or technical terms** across disciplines (e.g., *photosynthesis*, *thermodynamic*).
- **Extension Activities:**
 - Ask students to find five new "academic" or "STEM" words in their textbooks and break them down into morphemes.
 - Encourage learners to make a "Word Detective Journal" to track recurring roots and meanings across subjects.