Trophic levels describe the ranking of organisms in a food web, based on who eats who.

**1st Trophic Level:**
Photosynthesizers—organisms that use energy from the sun to produce food. Examples: plants & moss.

**2nd Trophic Level:**
Organisms that eat photosynthesizers. Examples: decomposers, mutualists, & root feeders.

**3rd Trophic Level:**
Organisms that eat 2nd trophic level organisms. Examples: shredders, predators & grazers.

**4th Trophic Level:**
Organisms that eat 3rd trophic level organisms. Examples: higher level predators like birds, moles, etc.

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Use the clues to unscramble each of the words. Copy the letters in the numbered cells to the cells with the same number below to solve the puzzle.

1. __________ are decomposers that convert the energy stored in the organic matter found in soil into forms useful to the rest of the organisms living in the soil. What trophic level are they? ______
2. __________ can form mutual relationships with plants; they get energy from plants and plants get nutrients from them. What trophic level are they? ______
3. __________ are single celled grazers that like to eat bacteria and release nitrogen into the soil. What trophic level are they? ______
4. A __________ can feed on roots and can cause a loss in crops. What trophic level is it? ______
5. An _________ is an invertebrate with jointed legs, like insect or spider. They can be predators of lower trophic level organisms. What trophic level is it? ______
6. An _________ shreds plant material and improves soil texture. What trophic level is it? ______
7. _________ are photosynthesizers that make their own food. What trophic level are they? ______

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1. BEICATRA
2. GUFNI
3. TOOPAROZ
4. ONTMEADE
5. DOPHARRTO
6. TEMHORAWR
7. LATPSN

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