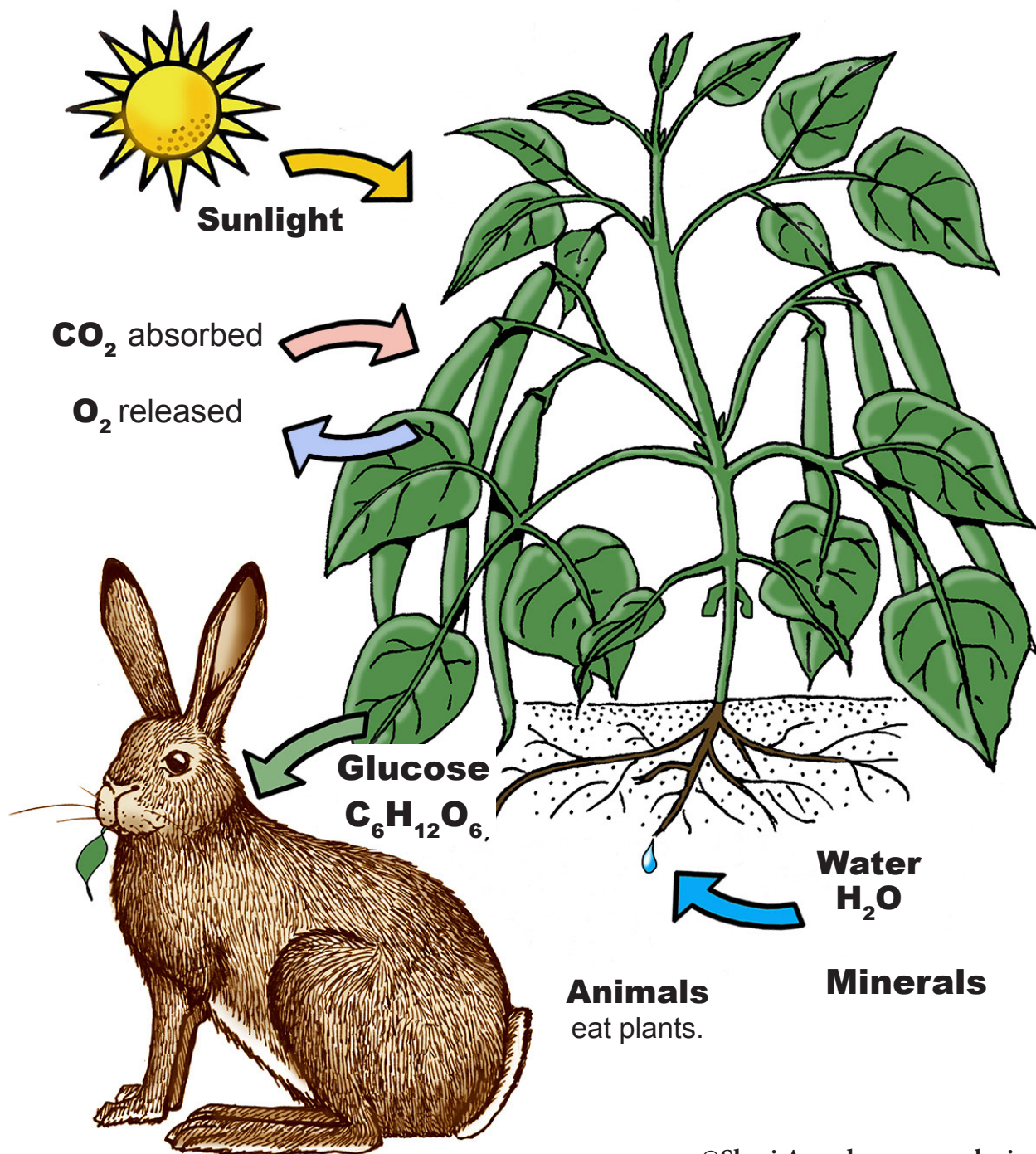


Matter and Energy Flows Between Organisms

Plants take in sunlight, water and carbon dioxide and convert them through the chemical process of **photosynthesis** into glucose. $\text{Sunlight} + 6 \text{H}_2\text{O} + 6 \text{CO}_2 \longrightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{O}_2$ This fuels **cellular respiration** producing energy in the form of ATP used for plant growth, repair, and reproduction. This matter and energy is then passed onto the animals and other living things that consume them and used for *their* growth, repair, and reproduction. At death, the matter of all living things is broken down and recombined by decomposers in their ecosystems.

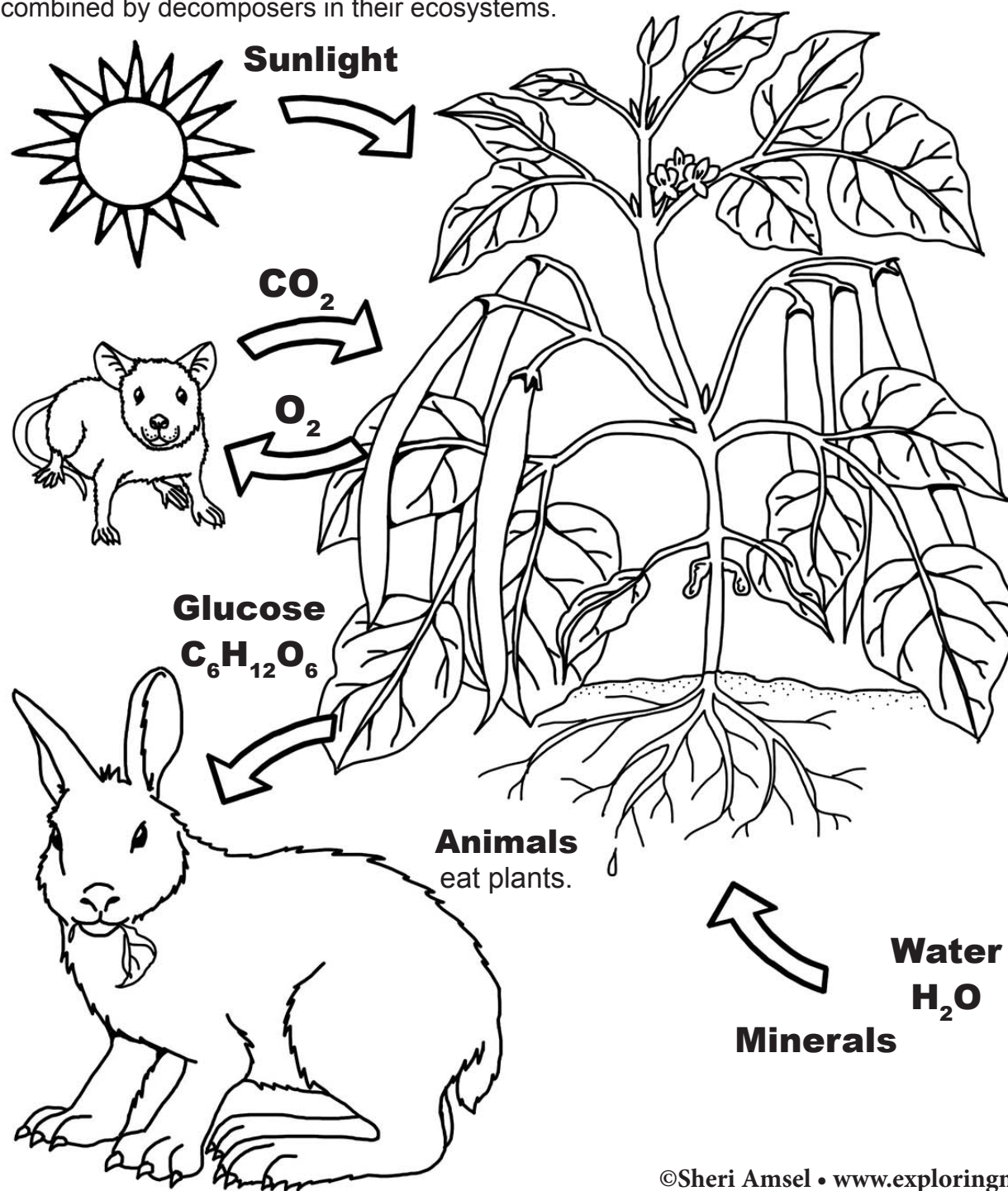


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LS1.C: Organization for Matter and Energy Flow in Organisms - As matter and energy flow through different organizational levels of living systems, chemical elements are recombined in different ways to form different products.

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