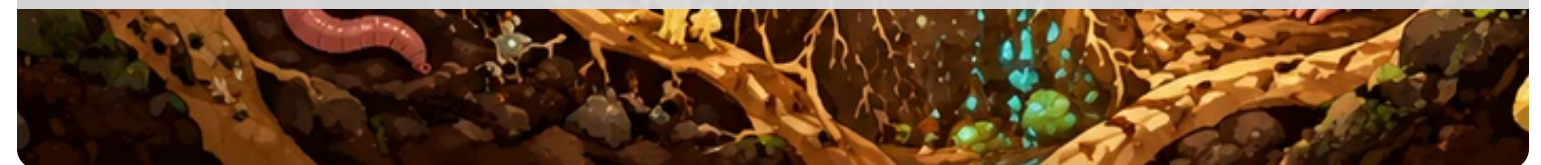




# RhizOlympiad: Radical Root Adventures

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Rooty the elf stands in a sunny meadow wearing a magnifying glass necklace, holding a giant glowing map of the underground world. Around him, bright green grass and bright yellow dandelions sway in the breeze, hinting at the secret structures hidden just beneath the soil.



Rooty points his magical flashlight into the earth to reveal a thick, straight taproot drilling deep down like a carrot, with smaller hair-like roots branching off it. Next to it, he examines a clump of grass showing a fibrous root system that looks like a tangled, bushy web of spaghetti spreading out in all directions.



To study taproots for his big exam, Rooty lines up three classic examples on a wooden table: a bright orange carrot, a plump purple radish, and a fuzzy dandelion root. Each plant clearly displays one main, thick central root plunging straight downward into the rich dark soil.



Switching his focus to fibrous roots, Rooty observes three different plants side-by-side in clear glass pots: a stalk of green corn, a cluster of scallions with white stringy bottoms, and a patch of lawn grass. Their roots form a dense, shallow mat of equal-sized threads that grip the soil firmly.



Rooty watches a giant tree drink from the ground, showing how the roots act like natural straws absorbing water and minerals to send up to the leaves. The roots also act like strong anchors, holding the massive tree perfectly steady against a sudden gust of wind.



Deep in a misty jungle, Rooty looks up in amazement at a mighty Banyan tree with thick prop roots hanging down from its branches like heavy wooden pillars to push into the ground. Nearby, he spots a rubber plant and a laurel tree, which also use these hanging pillar roots for extra balance.



Walking through a squishy, wet mangrove swamp, Rooty examines stilt roots that grow out from the lower trunks of trees like sturdy wooden stilts, holding the plants high above the water. He notes down three examples in his journal: the red mangrove, the walking palm, and the fierce pandanus plant.



Rooty climbs a mossy stone wall following a lush green ivy plant that uses tiny, sticky climbing roots to grip the rock like a mountain climber. He compares it to a vanilla orchid and a black pepper vine, which both use these clever claw-like roots to scale tall forest trees toward the sunlight.



High up in the canopy, Rooty discovers an orchid sitting on a tree branch with silvery aerial roots dangling freely in the open air to soak up moisture directly from the humid fog. He observes three air-loving plants doing this: the moth orchid, the Spanish moss, and the green bromeliad.



With his notebook full of colorful diagrams and three pictorial examples for every category, Rooty stands proudly at the top of the hill holding a golden Science Olympiad trophy. All the plants around him seem to rustle happily, celebrating the young botanist who finally mastered the secrets of the root kingdom.