



Junior Master Gardener® Level 2

Operation W.A.T.E.R.: Dr. Thistle Goes Underground

Grade 6 Texas Essential Knowledge and Skills

Leader Guide Activity	Language Arts	Mathematics	Science	Social Studies
Dirty Scavengers	6.4,6.5,6.10, 6.15,6.16, 6.17	6.8,6.2,6.11, 6.3	6.1-6.5, 6.7	6.7
Loamy Homey	6.9,6.15, 6.16,6.17	6.8,6.11	6.1-6.5, 6.7	6.6
Tension Underground	6.9,6.13	6.8,6.11	6.1-6.5	NA
Nailing Roots	6.9,6.22, 6.13	6.1,6.11	6.1-6.4,6.8,6.12	6.6
Nutrient Cycle Expedition	6.9,6.11, 6.16,6.17, 6.20	6.11	6.8,6.12	NA
Plant Makeovers	6.9,6.13	NA	6.8,6.3,6.12	6.6
Micro-Baked Dirt Cake	6.9,6.16, 6.13,6.17	6.3,6.8,6.11	6.1-6.4,6.8	6.6
Composting Above and Below	6.15,6.21, 6.13	6.3,6.8,6.11	6.1-6.4,6.8	6.6
2L Compost Capsule	6.9,6.13	6.1-6.3,6.8,6.11	6.1-6.4,6.8	6.6
2,000,000,000 Tons	6.9,6.13	6.1,6.8,6.11	6.1-6.4,6.9,6.14	6.6,6.7,6.9, 6.23
Dirt Castles	6.9,6.11	6.1,6.2,6.8, 6.11	6.1-6.4,6.9,6.14	6.6,6.7,6.9, 6.23
Sticky Stake, Splashing Tubes and Runoff Tiles	6.9,6.11, 6.15,6.16, 6.17	6.1,6.2,6.8, 6.10,6.11	6.1-6.4,	6.6,6.7,6.9, 6.23
Water Cycle Museum	6.9,6.11	6.10,6.11	6.1-6.6,6.8,6.14	6.6
Sweat Plants	6.9,6.11	6.2,6.8,6.2	6.1,6.4,6.10	NA
Drinkable Ocean Water	6.9,6.11	6.11,6.8	6.1-6.4,6.7	6.20
Water Sandwich Bowl	6.9,9.11, 6.16,6.17, 6.20	NA	6.1,6.3,6.5,6.14	6.3,6.6,6.9,6.7 6.20,6.23
Water in Your Hands	6.9,6.15-6.17	NA	6.2,6.3,6.14,6.6	6.6,6.7,6.23
Carpeting Wetlands	6.9,6.15	6.2,6.3,6.8, 6.11	6.2,6.3,6.5,6.6, 6.14	6.6,6.7,6.23
Water Wicking	6.5,6.6,6.9	6.8,6.11	6.1-6.4,6.8	NA
Percolation Race	6.9	6.7,6.8	6.1-6.4,6.8	NA
Read the Roots	NA	NA	6.1-6.4	NA
Soaking Soil Cylinders	6.11	6.7,6.10,6.11	6.1-6.4,6.6	6.6,6.7,6.23
Mulch Moisture Master	6.22	6.7,6.10,6.11	6.1-6.5,6.6	6.6,6.7,6.23
Root Zone Water Police	6.9	6.2,6.3,6.4, 6.11	6.1-6.5,6.6	6.6,6.7,6.23

Grade 7 Texas Essential Knowledge and Skills

Leader Guide Activity	Language Arts	Mathematics	Science	Social Studies
Dirty Scavengers	7.4,7.5,7.9,7.10,7.16,7.17	7.2,7.9,7.13	7.1,7.2,7.4,7.14	7.20
Loamy Homey	7.13,7.9,7.15,7.16,7.17	7.9,7.13	7.1-7.4,7.12	7.20
Tension Underground	7.9	7.13	7.1-7.4,7.6	7.22
Nailing Roots	7.9	7.13	7.1-3,7.6,7.12	NA
Nutrient Cycle Expedition	7.9,7.11,7.16,7.17,7.20	7.13	7.12,7.6	NA
Plant Makeovers	7.9,7.13	NA	7.3,7.3,7.6,7.9,7.12,7.14	NA
Micro-Baked Dirt Cake	7.9,7.16,7.17	7.3,7.9,7.13	7.1-7.4	NA
Composting Above and Below	7.15,7.21	7.3,7.9,7.13	7.1-7.4,7.12	NA
2L Compost Capsule	7.9	7.2,7.3,7.9,7.13	7.1-7.4,7.12	7.9
2,000,000,000 Tons	7.9	7.9,7.13	7.1-7.4,7.14	7.9,7.10,7.23
Dirt Castles	7.9,7.11	7.2,7.9,7.13	7.1-7.4,7.14	7.9,7.10,7.23
Sticky Stake, Splashing Tubes and Runoff Tiles	7.9,7.15-7.17,7.11	7.2,7.9,7.13	7.1-7.4,7.14	7.9,7.10,7.23
Water Cycle Museum	7.9,7.11	7.11,7.13	7.1,7.3-7.5	NA
Sweat Plants	7.9,7.11	7.2,7.9,7.13	7.1,7.4	NA
Drinkable Ocean Water	7.9,7.11	7.9,7.12	7.1-7.4,7.14	7.20
Water Sandwich Bowl	7.9,7.11,7.16,7.17,7.20	NA	7.1,7.3,7.5,7.14	7.9,7.10,7.20,7.23
Water in Your Hands	7.9,7.15-7.17	NA	7.2,7.3,7.5,7.8,7.14	7.10,7.20,7.23
Carpeting Wetlands	7.9,7.15	7.2,7.3,7.9,7.13	7.2,7.3,7.4,7.10,7.12	7.10,7.20,7.23
Water Wicking	7.5,7.6,7.9	7.9,7.13	7.1-7.5	NA
Percolation Race	7.9	7.9,7.7	7.1-7.5	NA
Read the Roots	NA	NA	7.1-7.4	NA
Soaking Soil Cylinders	7.11	7.7,7.11,7.13	7.1-7.5,7.14	7.9,7.10,7.23
Mulch Moisture Master	7.22	7.3,7.7,7.11	7.1-7.5,7.14	7.9,7.10,7.23
Root Zone Water Police	7.9	7.2,7.3,7.13	7.1-7.5,7.14	7.9,7.10,7.23

Grade 8 Texas Essential Knowledge and Skills

Leader Guide Activity	Language Arts	Mathematics	Science	Social Studies
Dirty Scavengers	8.4,8.5,8.9,8.13,8.15-8.17	8.2,8.14	8.1-8.5,8.12,8.14	8.12
Loamy Homey	8.9,8.13	8.2,8.14	8.1-8.5,8.14	NA
Tension Underground	8.9	8.14	8.1-8.5	NA
Nailing Roots	8.9	8.5,8.14	8.1-8.3,8.6	NA
Nutrient Cycle Expedition	8.9,8.16,8.17,8.20,8.11	8.03	8.1,8.2,8.6	NA
Plant Makeovers	8.9,8.13	NA	8.3,8.6	NA
Micro-Baked Dirt Cake	8.9,8.16,8.17	8.4,8.8	8.1-8.4	NA
Composting Above and Below	8.15,8.21	8.14	8.1-8.4,8.6,8.10	NA
2L Compost Capsule	8.9	8.1,8.2,8.14	8.1-8.6,8.10	NA
2,000,000,000 Tons	8.9	8.14	8.1-8.5,8.14	8.12,8.32
Dirt Castles	8.9,8.11	8.2,8.14	8.1-8.5,8.14	8.12,8.32
Sticky Stake, Splashing Tubes and Runoff Tiles	8.9,8.15-8.16,8.11	8.1,8.2,8.13	8.1-8.5,8.14	8.12,8.32
Water Cycle Museum	8.9,8.11	8.12,8.14	8.1-8.4,8.10,8.12	NA
Sweat Plants	8.9,8.11	8.1,8.2,8.14	8.1,8.4	NA
Drinkable Ocean Water	8.9,8.11	8.1,8.14	8.1-8.4,8.14	8.29
Water Sandwich Bowl	8.9,8.11,8.16,8.17,8.20	NA	8.1,8.3,8.12,8.14	8.10,8.12,8.32
Water in Your Hands	8.9,8.15-8.17	NA	8.2,8.3,8.12,8.14	8.12,8.32
Carpeting Wetlands	8.9,8.15	8.2,8.3,8.14	8.1-8.5	NA
Water Wicking	8.5,8.6,8.9	8.14	8.1-8.5	NA
Percolation Race	8.9	8.7,8.14	8.1-8.4	NA
Read the Roots	NA	NA	8.1-8.5	NA
Soaking Soil Cylinders	8.11	8.7,8.14,8.12	8.1-8.4,8.14	8.12,8.32
Mulch Moisture Master	8.22	8.7,8.12,8.14	8.1-8.5,8.14	8.12,8.32
Root Zone Water Police	8.9	8.1,8.3,8.14	8.1-8.5,8.14	8.12,8.32