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Quick & Easy Habitat Education Activities Seed Dispersal Sort

Developed by Heidi Bohan/ Starflower Foundation

3-6

Third Grade
20-30 Minutes
Outdoors/ Indoors

<p>Descriptions: Students learn how and why seeds disperse for germination. Students observe and study different types of seeds and use a graphic organizer to sort seeds into dispersal types. This activity is designed to be followed by the <i>Seed Dispersal Hunt</i> activity.</p>	<p>Vocabulary Dispersal: <i>the process of spreading organisms from one place to another</i> Sort: <i>to arrange according to characteristic; to put in a certain place according to kind, class or nature</i> Germination: <i>to begin to grow or sprout.</i></p>
<p>Objectives:</p> <ul style="list-style-type: none"> • Students understand that seeds have different dispersal types. • Students use observable characteristics to classify seeds by dispersal type. 	<p>Washington State EALRs Science 1.1 Properties: Understand how characteristics are used to categorize life in living systems. 1.1.1 - Understand simple properties of common natural materials. Sort common objects by multiple simple properties. 1.1.5 Understand physical properties of Earth materials. 1.1.6 Understand characteristics of living organisms. Identify observable characteristics of living organisms. 1.2.1 Analyze how the parts of a system go together, and how these parts depend on each other. 2.1 Develop abilities necessary to do scientific inquiry.</p> <p>Science Kits: Plant Growth & Development</p>
<p>Print Materials:</p> <ul style="list-style-type: none"> • ‘How-to-Do Activity: Seed Samples & Dispersal Types’ • Master: ‘Seed Dispersal Sort’ graphic organizer <p>Kit Materials:</p> <ul style="list-style-type: none"> • ‘Seed Dispersal Type Samples’ <p>Teacher supplied:</p> <ul style="list-style-type: none"> • Copies of ‘Seed Dispersal Sort’ graphic organizer: 1 per student • Fresh examples of native seeds: <ul style="list-style-type: none"> • Bigleaf maple seeds • Fresh native berry • Other interesting native plant seeds (see ‘How-to-do Activity’) 	

<p>Before activity: Organize students into 6 study groups (see ‘How-to-do Activity’). Locate examples of seeds with various dispersal types in your natural habitat to use as fresh examples (see ‘How-to-do Activity’).</p> <p>Activity:</p> <ul style="list-style-type: none"> • Discuss seed dispersal: “Seeds have many ways to spread and make new plants” • “How do seeds do this?” Discuss and show seeds from ‘Seed Dispersal Type Samples’; one for each seed dispersal type. <ul style="list-style-type: none"> ○ Windblown: Fly through the air using ‘wings’ or ‘fluff’. ○ Chewed and Eaten: Animals chew or swallow seeds helping to spread them by opening seed casings or digesting them. ○ Animals carry: Unintentionally (seeds attach to fur, feathers, etc) or intentionally (burying or stashing for winter). ○ Falls to earth: Heavy seeds and seed heads drop around the plant. • “This spreading of seeds is called seed dispersal. Why do plants have different types of dispersal?” (seeds have different growth requirements to germinate, some prefer shade, or sun, or wet soil; seedlings can grow into large dense stands; plants that die each year can create new ones in their place, while others need to spread to new areas away from the parent plant.) • Show students examples of seeds with different dispersal types. <ul style="list-style-type: none"> ○ Show bigleaf maple seeds and how they spin and fly like helicopters. ○ Show cattail seeds and let a few drift in the air. ○ Rub a goldenrod seed cluster against clothing to show how the seeds stick. ○ Show fresh berry and discuss who might eat them and how this helps disperse the seed through scat. ○ Show Garry oak acorns and discuss how squirrels hide these and how this helps to disperse seed. ○ Show other fresh examples in the habitat area. Discuss their possible dispersal type. • Form students into 6 groups. Pass each group a ‘Seed Dispersal Type Samples’ set. Ask students to sort their seed samples into the four dispersal types. Share and discuss the results as a group. • Pass out ‘Seed Dispersal Sort’ graphic organizer. Ask students to draw one example of each seed dispersal type in the appropriate box. As a group, share results and compare conclusions. • Summarize: “Seeds disperse in many ways. In some cases there may be more than one dispersal type (e.g., windblown and animal carries; animal eats and falls to earth). How does this help the plant?” (increased chance for survival)
