

# Creating an Isolation Chart

**Ages:** Grades 1-6

**Learning Outcomes:** Have a general understanding of the pollination mechanisms and how these relate to isolation distances

**Instructions:** Using a square piece of cardboard, create two circles, one inside of the other. The inside circle represents self pollinated species of plants, the second circle represents insect pollinated species of plants, and the outer circle represents wind pollinated crops. Have students colour various vegetable plants and then glue them in the appropriate circle. Cut a hole in the very centre of the square and thread through two pieces of yarn, secure however is easiest, paper fasteners and paper clips may help secure the yarn.

Cut one piece of yarn long enough to reach the middle circle, the second piece of yarn should reach the perimeter of the cardboard square. Cut and attach an image of a bee or other pollinator to the end of the shorter string and an image of wind on the longer string. Students can use the yarn to see how far insects can travel and view which varieties are insect pollinated.

Optionally add labels to your diagram, label the plants, label the circles as self pollinated (3-15 m), insect pollinated (200-800m), and wind pollinated (250 m - 1.5 km), label underneath the plant image exact details on information such as population sizes, exact isolation distances, and type of pollinator.