Name\_\_\_\_\_ Date\_\_\_\_\_ Variable Science - "Blowing in the Wind" – Wind Dispersal Water And Science - Wind Dispersal

Plants cannot just drop their seeds where they are, otherwise there would soon be so many of their offspring in the same place that they would crowd each other out. Without enough space and food for all of them, the little plants would soon die off.

Fortunately, when plants are ready to send their seeds out there are a number of methods they can use to scatter or **disperse** them. Some plants have seeds which stick to passing animals or people, some have seeds which float on water and still others have seed pods which burst open so violently that they scatter the seeds far and wide. The plants we are going to learn about today have seeds which have **adapted** to be carried on the wind.

The kinds of seeds which are dispersed by the wind can be very different. Some plants, like dandelions or cottonwood have seeds with hairs or fluff called **pappus** attached, which act like little parachutes.

Some, like the foxglove, have seeds so tiny that they don't need any help to ride on the wind, and others, like the maple tree have seeds with wings which spin like a helicopter propeller. One thing which all these different seeds have in common is that they have a high **surface area to weight ratio**. This just means that, like kites, they are light in comparison to their surface area.

# Science - "Blowing in the Wind" – Wind Dispersal Activities

### A. What do you know about seed dispersal?

- 1. Why do plants scatter their seeds?
- 2. What four methods can plants use to scatter their seeds?
- 3. We looked at three ways in which seeds are adapted for wind dispersal what are they?
- 4. Name two man-made items with which we compare wind dispersed seeds.
- 5. What is the one thing all seeds which are dispersed by the wind have in common?

#### B. Create a seed.

Now make your own seed which will ride on the wind. You can use the picture of a maple seed in the reading or you can design something completely different. Use firm paper and a paperclip to weight it if necessary, but remember it has to be light in comparison to its size. Experiment with different sizes and shapes. When you are finished take your seeds outside and see whose seed travels the furthest.

## Science - "Blowing in the Wind" – Wind Dispersal Answers

### Activity A

- 1. To avoid overcrowding.
- 2. Sticking onto animals or people; floating in water; pods bursting open; wind dispersal.
- 3. Small and light enough to float in the air; they have hairs or fluff which acts as parachutes; they have wings.
- 4. Parachutes and helicopters.
- 5. They have a high surface area to weight ratio.

### Activity B

There is no right or wrong way for the children to complete this activity, except that the 'seeds' should remain aloft long enough to move at the very least a meter or two away.