

## Chapter Eight: Fourth and Fifth Grades

- ◆ Take a few good sized beans and soak overnight. Place in damp paper towel on a dish and have your child sketch the growth of the bean over the next couple of weeks. Keep the beans moist, and keep a sharp eye out on the accuracy of your child's drawings.
- ◆ Learn about fungus and mold by letting some cake or bread get moldy. Have a good look at what grows. Talk about blue cheese, penicillin and yeast.
- ◆ Tap the maples at the bottom of your backyard for maple syrup. There are many good books which tell you how you can do this – just remember, it takes about 40 gallons of sap to make one gallon of syrup! Other trees, such as white birch, can also be tapped.
- ◆ Find a tree that's down in the woods and count the rings to see how old it is (thicker rings indicate better growth conditions). Note scars from fires or other damage, or where branches broke off. Examine the bark and trunk for evidence of mammals (scratches from bears or deer) or birds (nest cavities or woodpecker holes). Look for beetles and other creatures under the bark.
- ◆ Go for a dandelion walk. Marvel at the many ways dandelions adapt to their environment and the many forms the plant takes. Look for tall thin ones; short, fat ones; plants that flower deep within the rosettes so that the lawn mower won't get them; look for dandelions in the cracks in sidewalks, between paving stones and along concrete steps; look for plants where the leaf pattern of 'teeth' is especially pronounced and where the pattern is softer. Are dandelions growing in full sun different from those growing in the shade? Do they flower all at once or in succession? Enjoy dandelions!
- ◆ Look at different stages of a plant's growth (the faithful dandelion could be used again) and mentally go forward and backwards in that plant's development. Visualize each stage in turn. This will give you and your child an experience of the formative forces which shape/create that plant. Draw or write about the experience. Perhaps a poem would be most apt.

It is really up to you and your style of teaching which determines how free-flowing or structured your Botany block is. One possibility is that you do a short block in the fall of Fifth Grade which is a very basic introduction to plants. Go out in your yard or to the park and see what plant activities speak to you at this time of year. Revisit Botany in the winter and do a few indoor activities like sprouting beans. At this point you could do a survey of plants, discussing types of plants and how humans use plants. Then, in the spring, pick up the block again whilst planting the garden and watching everything coming to life again. During this time you might want to do a more formal study of, for instance, the difference between monocotyledons and dicotyledons. There are many good reference books in the library which can assist with this.

Have fun with botany, experiencing it as it unfolds all around you.