

## Cultivating the Garden

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To make plants grow easier in our gardens we need to make sure our ground has water, nutrients and a soft place for plants to grow. When it does not rain, we add water to our gardens so the plants do not dry out. We apply fertilizer to add nutrients when they are low in the soil. We add compost or peat moss to the garden to make sure it is soft and not compacted. Why do you think plants need a soft place to grow? Imagine a carrot. If that carrot is trying to grow and hits hard soil or a rock it will bend and twist instead of growing straight.

Before we plant in the spring we want to loosen the soil by turning it over. This will help incorporate the nutrients the plants need to grow. Loose soil will allow for water and air to move freely. This soft place to grow will allow roots to easily move to reach air, water and nutrients.

We must make sure the soil is not too wet when we work in our garden. Walking on or working with wet soil will create compaction, or soil that is too packed together. Plants will have a hard time growing in compacted soil. To test if the soil is dry enough, take a handful of soil. It should crumble out of your hand in pieces. If it sticks together or water drips out of the soil is too wet to work.

A spade, shovel or pitchfork can be used to break apart the ground when it is time to plant. In a smaller garden or raised bed you might use a trowel to loosen the soil. Hoes are used to chop the top inch of soil to break it up just before planting. It is also a great tool to pull weeds. A garden rake can be used to break up clods or smooth out the soil in the garden bed. It is important to remove any stones or foreign objects that might be in the soil. The garden is now ready for planting! Your tools will last a long time if you take care of them. Wash off the soil when done using the tool and store them in a dry location.

### Source:

Gardening in the City, A 4-H Leaders Guide for Urban Gardening. M. Cockram, D. Rokow, & R. Kline, Cornell Cooperative Extension, Retrieved from <http://blogs.cornell.edu/garden/get-activities/signature-publications/>



Hoe



Shovel



Rake



Pitchfork



Trowel