How to grow tomatoes

**Tomato (Lycopersicon esculentum)**
Family: Solanaceae (Nightshade)
Season: Warm
Ease of growing: Moderate
Nutrient needs: Medium
Water needs: Medium
Common propagation: Transplant

**Seed facts**
Germination temperatures: 60°F to 95°F
Germination time: 14 to 21 days
Viability: 6 to 10 years

**Transplants**
Weeks to grow transplant: 5 to 8
Start: late April to May
Plant out: late May to June

**Planning facts**
Typical spacing: 24” in 36” rows
Plants per square foot: 0.5
Days to harvest: 60 to 80 from transplants

**Variety selection**
Tomato varieties are categorized in many ways including their growth habit, culinary use and shape. Varieties that continue to grow taller and produce fruit over the entire season are called indeterminate. Determinate varieties on the other hand will grow only so tall and will have a more concentrated fruit ripening. These require less staking and pruning. Certain tomatoes are best for slicing fresh while others are better for making pastes and sauces. Cherry tomatoes are wonderful fresh or in salads. Finally, disease resistance can be an important consideration when selecting a variety.

**Preparation and planting**
Avoid excessive N fertilization since this will encourage leaf and stem growth at the expense of fruit growth. Ideal spacing will vary with variety; for large indeterminate plants provide more space. When transplanting, bury surface of transplant plugs about 2 inches. If plants are very tall and leggy, lower leaves can be removed and plants buried deeper to encourage more vigorous plants.

**Care**
It is often recommended that indeterminate tomato varieties be pruned to avoid excessive vegetative growth. The basic idea is to remove “suckers” emerging between the main stem and leaves of plants until one to a few of them are left. If you’re trellising or staking your tomatoes, don’t forget to tie them up.

**Major pests**
- **Insects:** Cutworms, tomato hornworms, mites, thrips, Colorado potato beetle, whiteflies.
- **Diseases:** Septoria leaf spot, early and late blight, anthracnose, Fusarium and Verticillium wilts, bacterial spot, bacterial speck, tobacco mosaic virus.

**Harvesting and storage**
Unless a killing frost threatens, leave fruits on the vine until they’ve developed their full color and flavor. For tomatoes picked green, ideal ripening temperatures are between 60°F and 70°F. Once picked, tomatoes are sensitive to chilling injury and should not be stored at temperatures below 50°F.