

## Spinning Tops

Tops and boys just seem to go together. Making your own top is becoming a rarity. This project lets the boys experiment and design the best spinning top.

### Materials needed:

1. One 2 1/2" wood wheel  
(cf. [cherrytreetoys.com](http://cherrytreetoys.com), item #69).
2. 5" x 3/8" wood dowel.

**Hint: Dowel quality seems to be getting worse. Drill a couple of wheels with a 3/8" bit, then take the wheels with you to the store. Sort thru the '3/8' dowels to find the ones that fit your wheels and buy those dowels.**

3. 6" - 1 x 2 pine/spruce for handle.
4. 36" cord (the yellow polyester cord sold for construction is great).
5. White glue.



### Before the Meeting

**Hint: Be sure and make a top for yourself and try it out! Then demo it to the boys before they build theirs.**

1. Cut dowel and shape a point on one end (a rotary sanding disc on a belt sander works great).
2. Drill 1/2" hole through the end of the 1 x 2 x 6 wood (see photo). A 7/16" hole is ok, but the larger hole seems to work a little better. A Forsner® bit is great for drilling the hole.
3. Use a band saw to cut the handle as shown in the photo.
4. Drill all the wheels with a 3/8" bit as they may vary in hole size.

### Assembly at the Meeting

1. Use a fireplace lighter (or match) to melt the ends of their polyester cords (or else it will unravel).

**Warning: The melted ends of the cords will burn very badly! Bring a cup of water and dip the hot ends in the water or make the boys hold the string and count to 30 before they touch it.**

2. Insert dowel into wheel (they can try either side up). I have found that the most stable tops have the dowel exposed about 1/2" below the wheel. The top in the photo (above) has about 1" of the dowel exposed below the wheel and is not as stable as having 1/2" to 3/4" exposed. Raising the wheel higher on the dowel makes the top wiggle more and spin for a shorter time than having the wheel lower on the dowel.
3. Have all the boys try out their design and then adjust the wheel on the dowel to see if it is better or worse.
4. After the boys have decided on the position of their wheel, put a little white glue between the dowel and wheel to hold it tight.
5. Wind 'em up and have a Top Spinning Contest!