

Puzzle - Apple

This project takes some time to get ready, but the results are great! The kids love to make these apple puzzles and they are very challenging to assemble. This is a great project for junior high school aged boys and it can be used to teach using a band saw and a drill press. I would not recommend having boys in the younger than 7th graders use the band saw.

Materials needed:

1. 5" - 2" x 6" spruce/ fir
(nice, clear grained, soft wood).
2. 4" - 1/4" dowel.
3. Red shoe wax, white cloths.
4. Green latex paint for stem.
5. 150 grit sandpaper (3 x 4" piece for each boy).

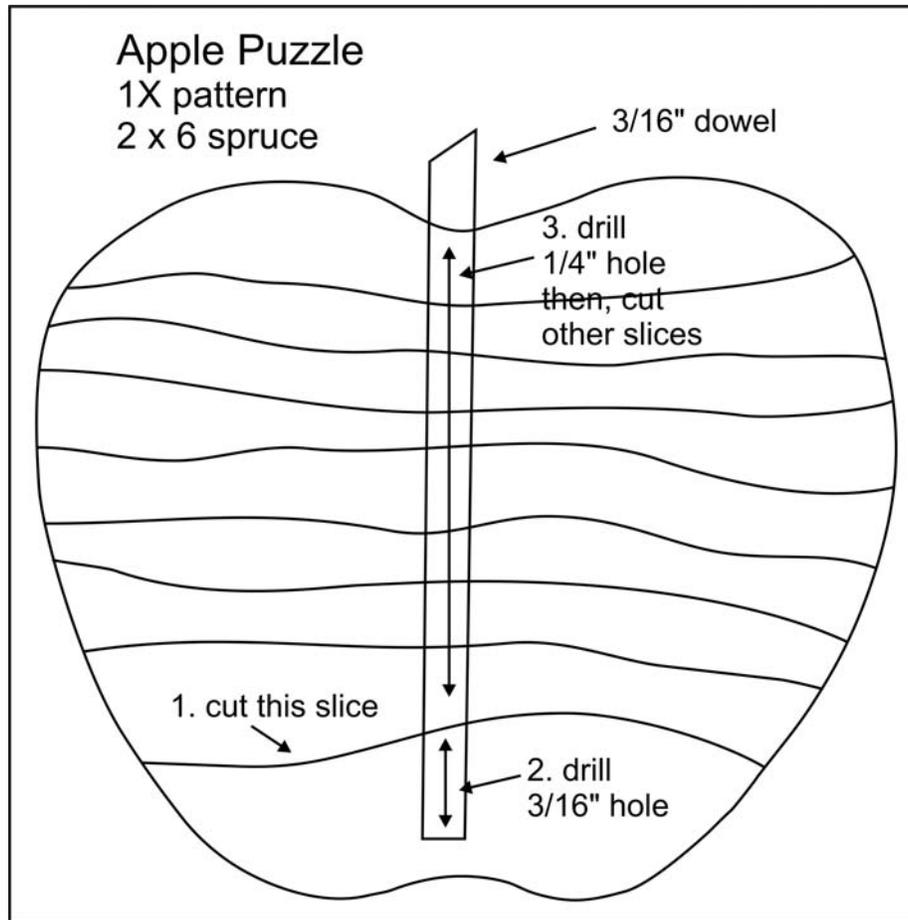
Before the meeting:

1. Cut out apple shape (see 1X pattern below).
2. Cut bottom slice.
3. Drill 1/4" hole through upper portion of the apple (so slices will fit loosely on the 3/16" dowel later).
4. Drill 3/16" hole into bottom slice (so 3/16" dowel can be glued into this hole).
5. Using a 3/16" dowel, cut 4" with a 45° slant on one end.
6. Cut slices in upper portion of apple (these don't need to follow the pattern, about 8 slices makes a difficult puzzle. Use fewer slices for very young kids.)
7. Paint the upper 1" (pointed end of the dowel) green.
8. Put the dowel and apple slices in plastic baggie (if the pieces get mixed with another apple puzzle, good luck!)



Assembly at the meeting:

1. Glue 3/16" dowel (square end) into bottom-most apple slice.
2. Sand each slice of the apple puzzle with 150 grit sandpaper to remove splinters, etc.
3. Stain the apple slices with red shoe wax using pieces of cloth.
4. Use a second white cloth to buff the wood. No need to put wax between the slices!
5. Be sure they take their puzzle home in a plastic baggie with their name on it so they don't lose any apple slices. Check before they leave that their apple will go together and that they didn't get some slices mixed up with someone else!



1X pattern for the Apple puzzle.

You may cut the slice shapes as curved as desired using a band saw (a 1/4" blade is ok for these cuts). Be sure to sand the outside and faces of the apple before cutting the slices. After you cut out the apple shape, then:

1. Cut the bottom-most slice.
2. Drill the 3/16" hole about 1/2" into the bottom slice.
3. Drill the 1/4" hole through the entire upper section (before cutting into slices!).
4. Cut the rest of the slices. Let the boys sand the rough saw edges from the slices during the meeting.