Three Dimensional Combat Solutions

For aerial and aquatic miniature combat

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Gaming in Three Dimensions

Most Gamemasters are very adept at thinking in two-dimensions. Up and down only come into play when climbing a tower, descending into a dungeon, or the rare flying encounter. Consequently, the standard bag of tricks will definitely need some adjustments.

Chutes and Ladders: The standard adventure is riddled with stairs, pits, narrow ledges, and precarious bridges—none of which are much more than interesting scenery that you can swim or fly over. Perils do exist though, from dangerous water or air currents, to tight crevasses, to entangling seaweed; there are many alternatives to choose from. When designing a three dimensional adventure keep in mind that the adventures always have the option of moving over most things.

Low Ceiling: Many Gamemasters try to compensate for this great expanse by running the adventure in shallow water or providing some sort of aerial ceiling. This forces the game into a more two-dimensional perspective, but should not be overused. Players will grow bored of the shallows eventually and want to venture out into deeper territory.

Lead Feet: Gamemasters aren't the only ones who will gravitate to the familiar. Many players will tend to stick close to the ground or ocean floor. There are several good reasons to do this. For one, you do not have to worry about sinking or falling. For another, by being on the ground or the sea floor, you automatically eliminate nine squares from which you can be attacked (barring burrowing creatures, of course). Heavy and non-flying creatures tend to move along the ground as well. Consequentially, this should not be terribly discouraged, as it provides a stable base from which to launch an encounter.

Falling into Oblivion: Characters will eventually become quite confident with their new three-dimensional freedom, and bravely swim or fly over just about anything. Unfortunately, this can cause some very fatal and permanent consequences. If a character goes unconscious or becomes immobile, he will sink or fall like a rock to whatever lies below. Occasionally that means fathomless depths from which the pressure will smash him and his corpse will never see the light of day again. It could also mean being smashed to bits upon jagged rocks. Fallen victims and NPCs should readily fall to these fates as a reminder that it's not always safe to move everywhere unchecked.

The most challenging aspect of an underwater or aerial campaign is working in three dimensions. Gamemasters have tried for decades to come up with the perfect three-dimensional system, and few have found a palpable solution. The following will examine some of the pros and cons of the most common solutions. Afterwards, we will introduce you to the method that we found worked best while play-testing the Cerulean Seas setting.

SOLUTION 1: STACK THOSE DICE

This quick and inexpensive way to show altitude has been used since tabletop gaming began. It works by balancing a miniature atop a stack of six-siders. The taller the stack, the further up the character is from the battle map. While this is quick and simple, it is also quite easy to knock over and seldom to scale (unless you use 1 inch square dice). It is not feasible to use this method for large variances (any stack over 4 dice high tends to be precariously unstable). In addition, it is hard to show when characters are directly underneath the elevated character, because there is a stack of dice in the way.

This is, however, preferable in situations where differences in depth or height are less than 15 feet. For that reason, included with the other templates at the end of this supplement is a template for "depth cubes" which uses this method of altitude representation, but with greater stability and attention to scale. Keep those d6s for rolling *fireball* damage.

SOLUTION 2: ORDER A PIZZA

More than a few tabletop gamers have serendipitously discovered the value of those little table-like plastic pieces (box tents) that are found inside pizza-boxes to keep the lid of the box from touching the pizza. With a little scotch tape around the top of each, they can stack with even more stability than dice do. As an added bonus, miniatures can finally be placed underneath each other in several levels. Unfortunately, they are not to scale. Worse yet, every pizza company seems to use different sizes and shapes, so unless you always order from the same place, you will end up with a collection of mismatched pieces. While they are more stable than stacked dice, they still fall down easily when the stack approaches only four levels high. While you can put most Medium and Small-size miniatures underneath each "table," Large and larger miniatures still will not fit. They are also not too appealing, as scotch tape picks up all manner of debris, and they are often stained with pizza sauce. Our advice is to throw them away with the pizza box, unless you are in a real pinch.

SOLUTION 3: QUEST FOR THE COMMERCIAL

Commercial solutions to 3D miniature combat do exist, though they may be extremely hard to find and often far too expensive for the average gamer. They work in various ways from the stackable to moving platforms and are usually made of clear plastic. While viable solutions, most are limited in use in some way. We suggest that you see them in action before you purchase them, because many that we had tested were not nearly as useful as they initially appeared. This may be a great feat in and of itself, however, because finding them at your local gaming store seems to be a bit of a challenge in many areas.

SOLUTION 4: THE TIERED TABLE

The most fancy of these do-it-yourself projects are made of Plexiglas sheets sandwiched between Lucite cylinder "table legs." This creates a multi-tiered table-like structure on which several miniatures can rest at different elevations. Combat grids are drawn or etched into each sheet. While a wonder to behold and excellent for highly structured scenarios, they do little more than take up a lot of space. They are not adjustable, hard to transport, will not allow large minis to fit in-between the platforms unless the platforms are far enough apart to fit them. Overall, hardly worth the effort it takes to make them.

SOLUTION 5: MINIATURE MARIONETTES

Truly the most bizarre solution for 3D combat is the application of gallows-like stands that hold spools of string. Miniatures are suspended from the stands by the strings. This method is one of the few that allows for a completely adjustable elevation, and the strings can overlap allowing for nearly any sized creature to be directly below any other creature. The strings are often marked to delineate the amount of squares that the miniature is hanging from. By subtracting the length of the string from the height of the stand, you get altitude above the ground (or sea floor in the case of aquatic combat). Unfortunately, the miniatures regularly swing freely, and the strings tangle if they are anywhere near each other. Add to that the time it takes to affix and remove each miniature and the whole setup is terribly cumbersome to keep up during combat. While not difficult or expensive to construct, and more accurate than previous methods, the string method is more of a mess than it is worth.

RECOMMENDED SOLUTION: TRACKER TREES

During play-testing, the Alluria team tried all of the previous solutions, and then we came up with our own. We proudly present to you a new and affordable solution to three-dimensional combat on the miniature board. Tracker trees, as we have come to call them, are simple stands that hold adjustable platforms. Each platform can hold several miniatures at once, and the platforms can be moved up and down with ease. The entire stand is easy to move, store, and transport. Several stands can be made, and the design can be adapted to be larger or smaller to accommodate different scenarios. They are stable, easy to use, and easy to make. Complete directions are included here, as well as additional templates (both color and black & white) at the end of this supplement.

Supplemental Items: We recommend keeping a few dowel rods that are marked in one inch increments to easily calculate distance between two miniatures. In addition, having a few "depth cubes" (see Solution 1: Stack Those Dice) handy can make underwater or aerial combat go even faster.

How to make your own Tracker Trees

The following details how to make our solution to three-dimensional miniature combat. Because of the way the materials are sold, we found that it is easier to make each stand in pairs. These instructions produce two tracker trees.

MATERIALS NEEDED

These materials can be found in most hobby, art, or craft stores at affordable prices.

- A 5/16 inch diameter wooden dowel rod, 36 inches long
- A white-foam board about 1/8 inch thick. You will need a foam board at least 8 inches square, but most come in much larger sizes.
- Two 4-inch square wood bases, about ¼ inch thick. Most wood and even pressboard will work, but avoid balsa wood because it is too light. You can buy any sized wood plank and cut it into 4 inch squares.
- Four mini-clothes pins that are about 2 inches long. These are the spring loaded kind, and are available in bulk bags.
- A no-wrinkle glue stick
- Three sheets of white paper
- Three sheets of white cardstock (optional)
- A few scraps of cardboard
- Wood glue
- Laminating sheets or tape (optional)
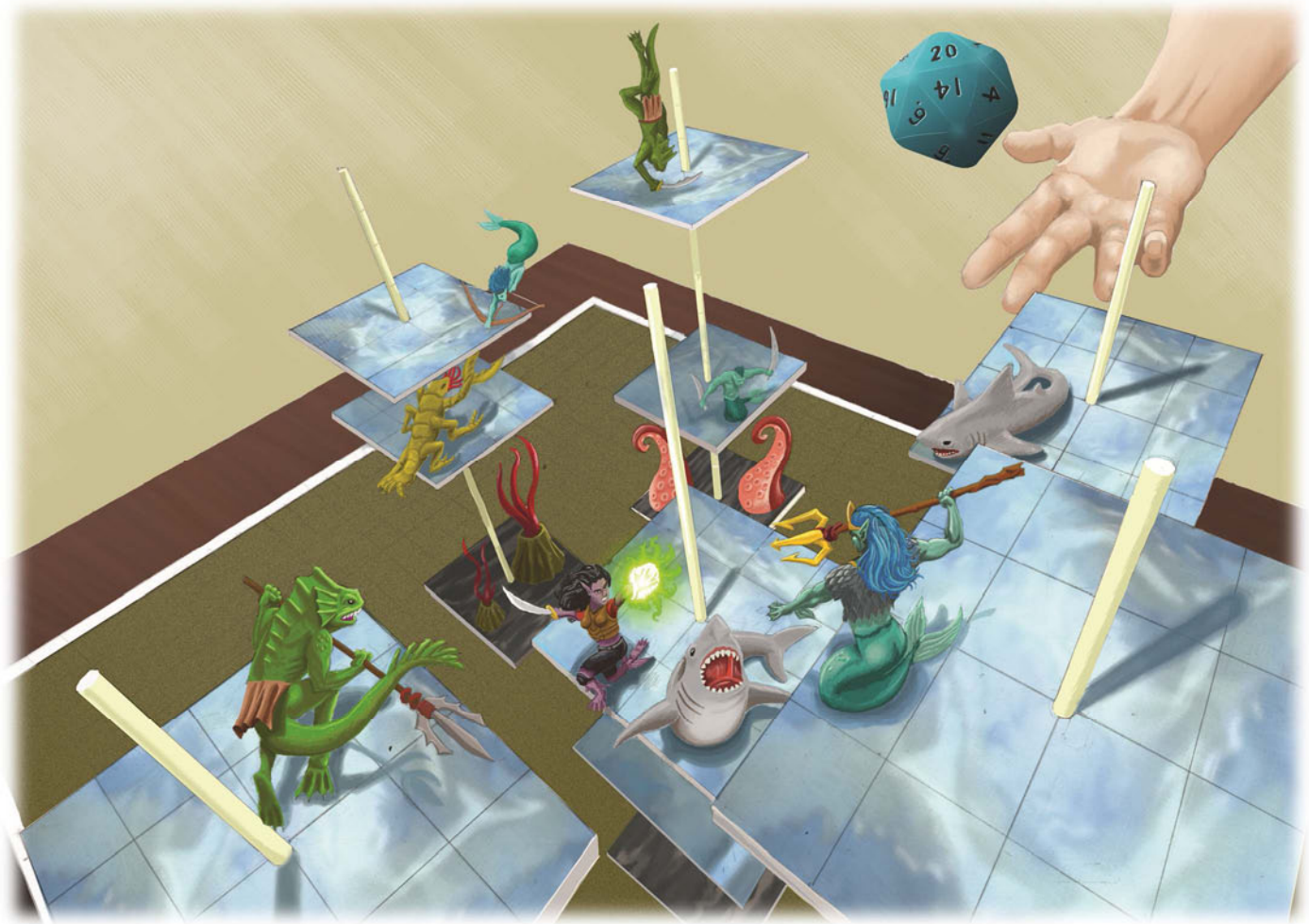
TOOLS NEEDED

These tools facilitate building these stands. If you do not own these tools, we suggest that you borrow them from someone who does.

- drill with 5/16 drill bit
- exacto knife
- felt tip pen (no-bleed preferable)
- hobby or hack saw
- pencil
- printer
- sand paper
- scissors
- tape measure

DIRECTIONS FOR ASSEMBLY

1. We highly recommend that you use the templates provided at the end of this supplement. Both color and black and white are provided. Simply print out three copies of your choice on regular white paper and cut out four platforms, two bases, and two sets of center gradients. Wait to cut out the center "dot" of the platforms and bases until later.

Additional Options: The platform and base templates work best if printed on cardstock, while the center gradients must be printed on paper (as cardstock is too thick and unpliable). Each template piece can be laminated (on the printed side only) afterwards, to ensure maximum durability.

2. Trace around the edge of the base template onto the wood panels with a pencil. Using your hobby saw cut each wood base to size. If using natural wood, be careful not to put too much pressure on the wood as it is prone to splitting. If it does split, simply glue it back together with some wood glue. Afterwards, use a no-wrinkle glue stick to affix the template print side up to the top of the wood base. Using your drill, drill a hole through each base at the dot in the center. Put the bases aside.

3. Measure ¼ inch on each end of your 36 inch long dowel rod and mark it with a pencil. Apply glue stick to the back of the first center gradient template (one of the templates starting with "5").
Starting ¼ inch up to allow room for the base, glue one long edge to the dowel rod,

being very careful to keep the template parallel to the center of the dowel rod. Slowly wrap the template around the dowel rod, sheathing the dowel rod in paper, and creating an easy to read gauge. Next, use the glue stick to add adhesive to one of the 2nd center gradient templates (the one starting with "45"). Carefully line up the numbers and match the edges of the top of the 1st center gradient template (the one you have just glued to the dowel rod) to the bottom of the template that you are about to affix. The numbers should progress from 40 to 45 if you have done this correctly. As before, wrap the paper template around the center of the dowel rod. Afterwards, flip the dowel rod and do the same thing over again. Most 36 inch dowel rods are sold slightly more than 36 inches in length, which will likely leave a gap between the two templates ending in "85" that is a bit over an inch long. Find the center of that gap and saw the dowel rod in half. You now have two center poles nicely graduated in 1 inch (equivalent to 5 feet) increments.

Note: It may be a good idea to make a few extra center poles to measure distances between miniatures in three-dimensional space. It is a lot easier than the mathematical alternative, unless you are very good at applying the Pythagorean theorem ($a^2 + b^2 = c^2$) in your head.

4. At this point, you may choose to either glue the center poles into the base using wood glue (most stable) or simply place them into the holes (most portable). It can be a tight fit, but a light sanding with sandpaper will make them fit a little better. If it is too loose, glue a bit of paper around the outside of the bottom of each center pole until it fits more tightly.

5. Next, it is time to prepare the clamps that will keep the platforms from sliding down the poles. Cut out four pieces of cardboard that are roughly ½ inch wide and 1 inch long. As figure 1 illustrates, use wood glue to attach the edge of one piece of cardboard to the side of one clothespin on the opposite side of the clothespin's spring rest, while lining up one edge of the cardboard with the inside of the deepest groove of the clothespin. Do this for all 4 clothespins.
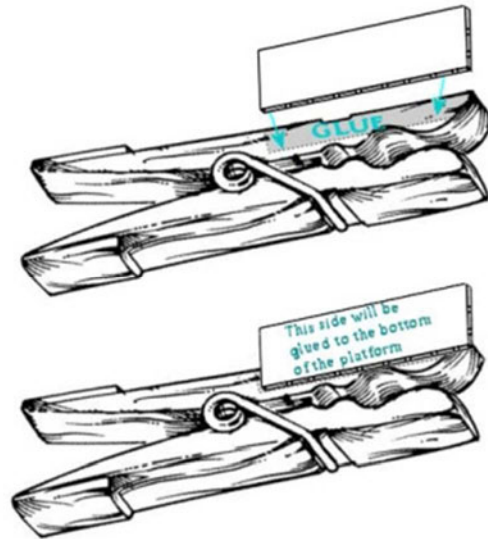
6. Next, glue the platform templates to one side of the foam board. Cautiously use an exacto knife to cut out each piece, including the center holes.

Note: Extra platforms can be quite useful. These directions have you create only two platforms per pole, though each pole can actually handle up to four without two much trouble.

7. Place a platform onto the pole. Coat the top of the cardboard on one of the prepared clothespins with a thin layer of wood glue. Clamp the clothespin onto the pole underneath the platform so that pole fits into the large groove of the clothespin. The clothespin should be jutting out perpendicularly from the dowel rod. Lower the platform onto the clothespin, and press the top of the clothespin's cardboard attachment into the bottom of the platform. Do this for all four platforms and let the glue dry.

The platforms should slide up and down with a little pressure. You can remove or add platforms at-will. The entire stand can be easily moved around the battlefield. We recommend at least one tracker tree per character, though a typical gaming table can fit twelve without much clutter. This design can be adapted to larger or smaller platforms to accommodate difference scenarios. They can also line up next to each other for larger creatures.
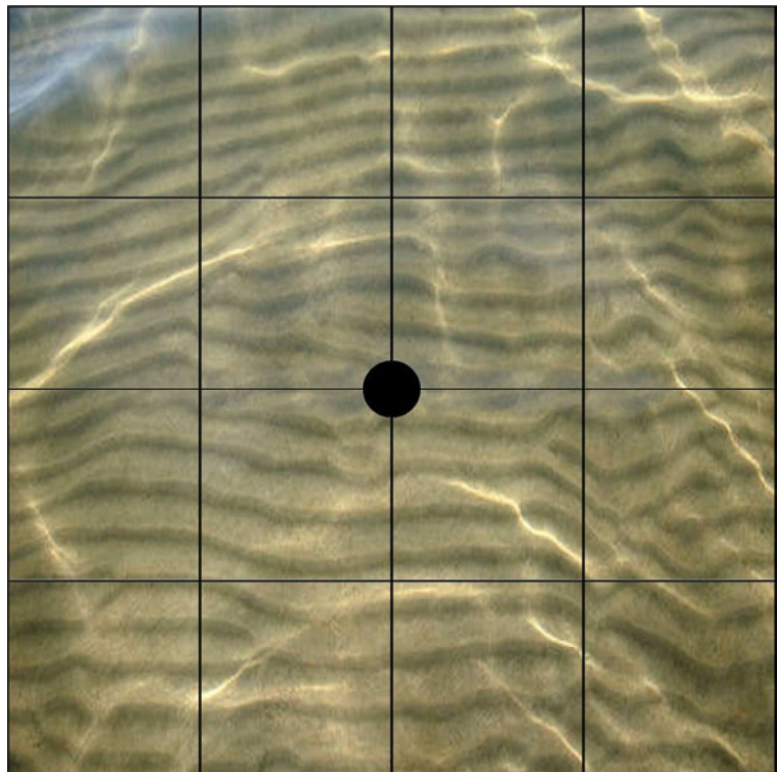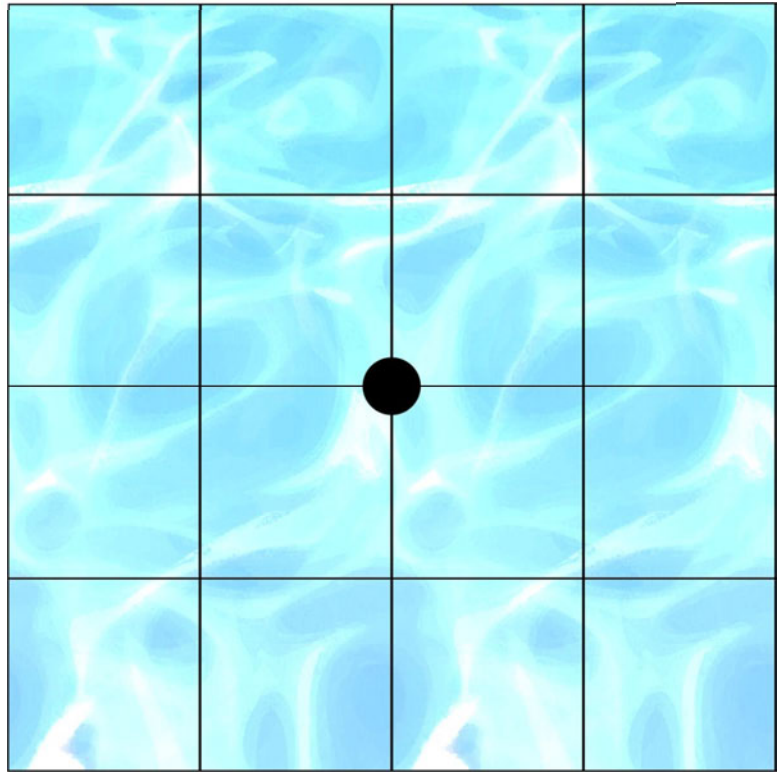
Tracker Tree Template
(blank white)

40	85
35	80
30	75
25	70
20	65
15	60
10	55
5	50
	45
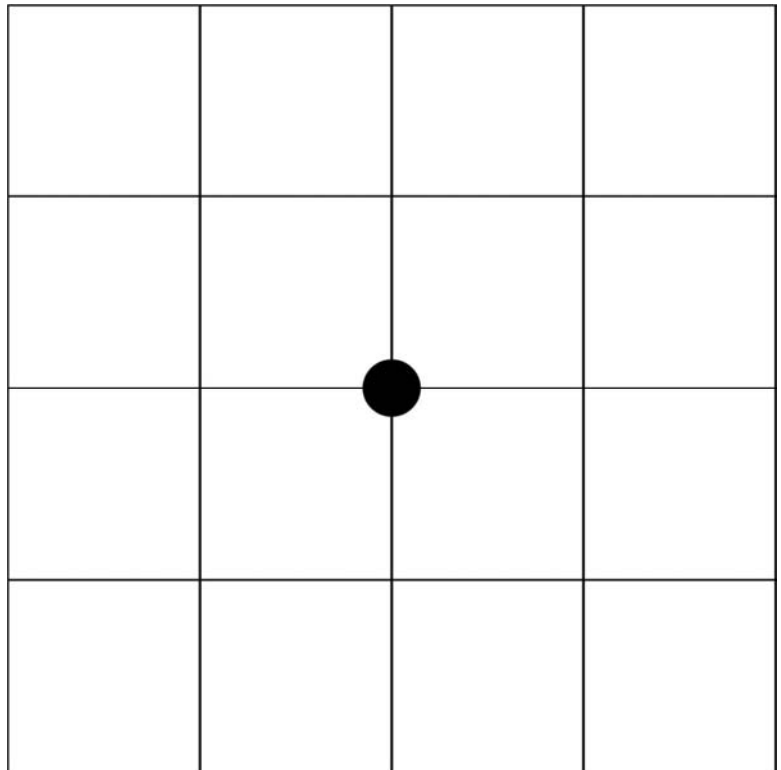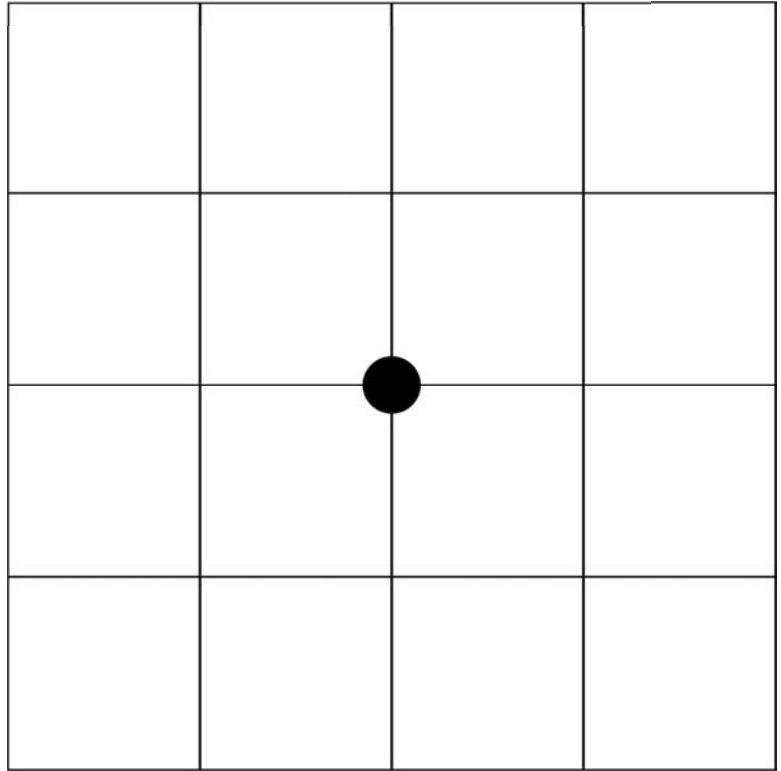
Start guage 1/4" up

Tracker Tree Template
(ocean theme)

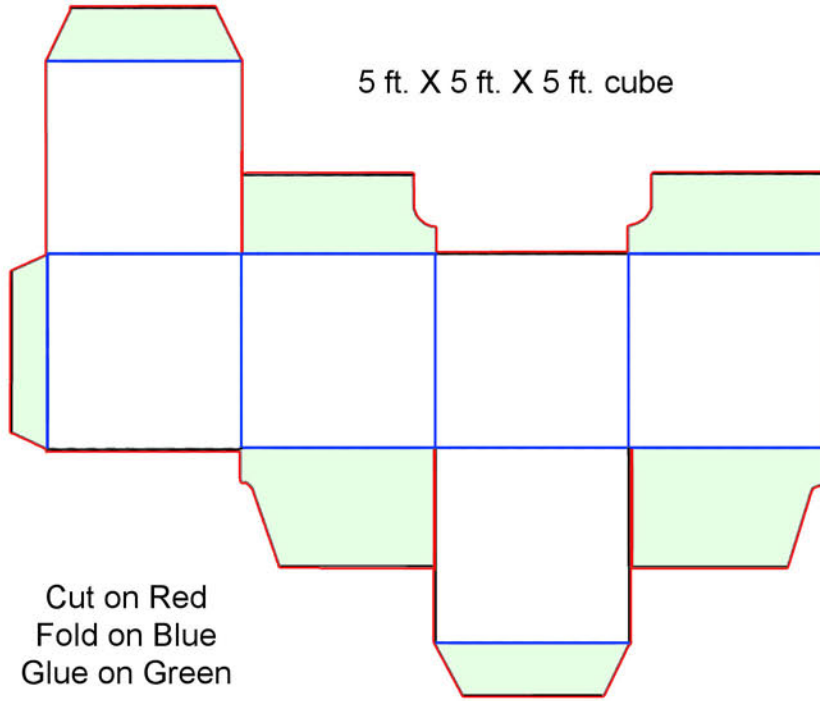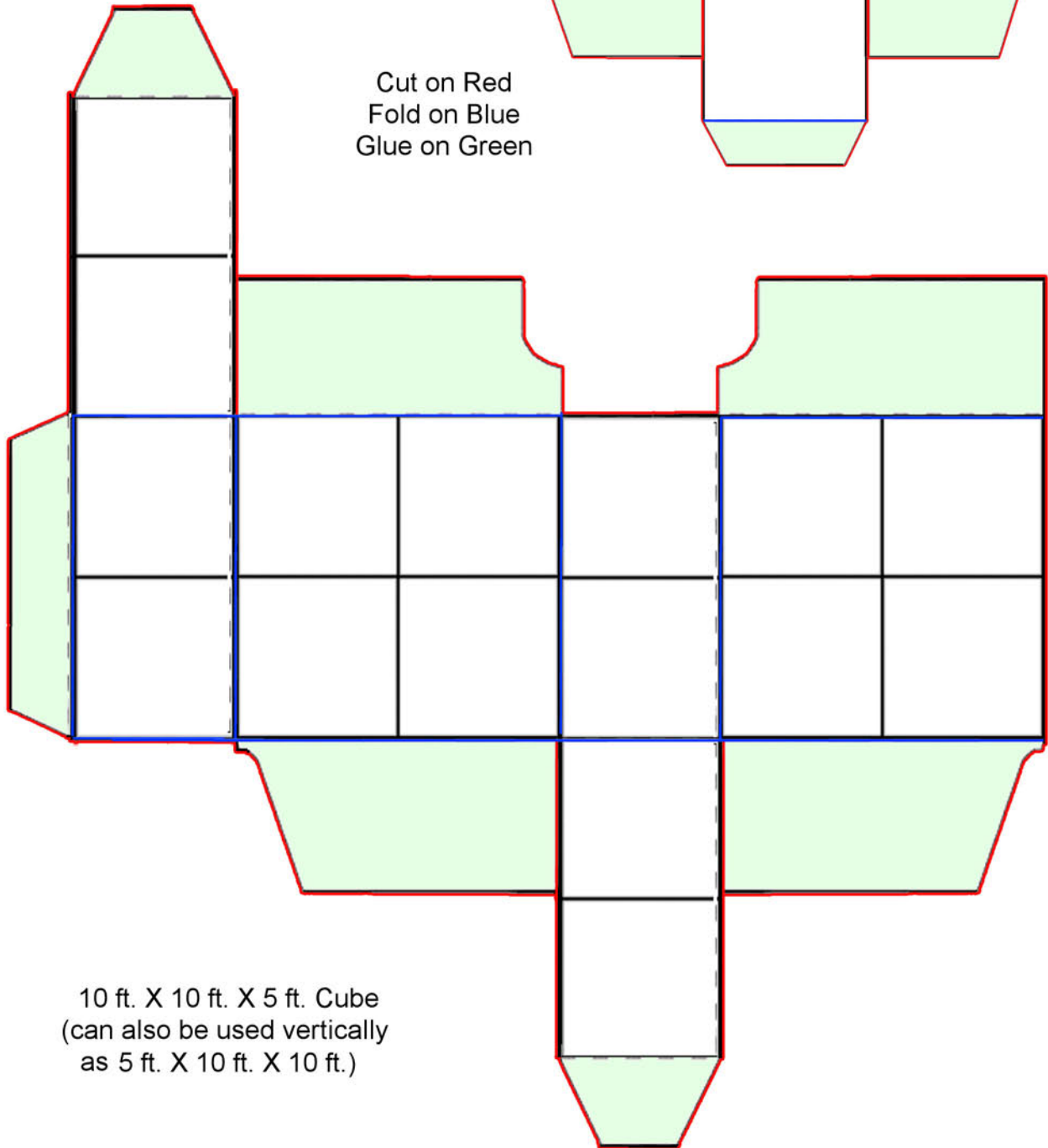| 40	85
35	80
30	75
25	70
20	65
15	60
10	55
5	50
	45

Start center gradients 1/4" up

Depth Cubes

Use these to help to
keep track of depth.

5 ft. X 5 ft. X 5 ft. cube

Cut on Red
Fold on Blue
Glue on Green

10 ft. X 10 ft. X 5 ft. Cube
(can also be used vertically
as 5 ft. X 10 ft. X 10 ft.)