

Practice Tips: Write It / Do It



USEFUL THINGS TO TRY: Practice with your teacher or at home with a parent.

1. Review the vocabulary word and phrases on the list below. Most students do not have much experience describing the relative positions of objects. The **HARDEST** part of this event is articulating these relationships in a logical sequence!
2. “Flat Object Photocopy” Start with a simple FLAT design that is SYMMETRICAL.
 - a. On a plate, use marshmallows and toothpicks and create a design. See the images on the back for some ideas. Using colored marshmallows might make it easier.
 - b. Let the team members examine it / memorize it. Let them talk together about the details of the construction and hear different ways to describe the connections. (Some descriptions are better than others!) Then take it apart and have them try to reconstruct it as a group.
 - c. Correct any mistakes in the assembly and have each individual WRITE the directions for putting it back together.
 - d. Ask another person to follow the “photocopy” instructions to see how good the directions are! (They should have a bag with the disconnected parts.)
3. “Lego Layout”
 - a. At the tournament, we use flat Lego sheets to mount the blocks. Ours have been cut into squares with about 15 – 20 round bumps on each side. Use one of these to make a **single layer** arrangement of Legos. (Use about 10 – 12 bricks.) Put some bricks right next to each other, but leave others like islands — not touching anything else.
 - b. Repeat the exercise from #2 above, allowing students to talk about the arrangement before they try to write it down — if they can’t say it, they won’t be able to write it! (NOTE: At the Tournament, block color is not important!)
 - c. When students can reproduce the single layer constructions, add a few blocks **in a second layer**. Sound easy? It’s not! Many students want to work from the top **down** — that doesn’t work well when you need to build from the bottom **up**.
 - d. Here’s a useful tip: Pick a “standard starting point” like the upper left corner. Get used to working from there. Rotate the base so “easy parts” are near the standard starting point!

(Over)



USEFUL WORDS TO KNOW: Here are some representative words you should know.

Adjacent	Plane	Square	Rectangular	Alternating	Acute Angle
Underneath	Layer	Circular	Triangular	Extending	Right Angle
Isolated	Base	Cylinder	Symmetry	Bridging	Parallel

USEFUL WEBSITES TO SEE: We verified these in March, 2010.

[http:// www.scioly.org/wiki/Write_It_Do_It](http://www.scioly.org/wiki/Write_It_Do_It)

http://departments.weber.edu/sciencecenter/ScienceOlympiad/write_it_do_it%20tips.htm

RULE CLARIFICATIONS: These apply only to DeKalb's Elementary Tournament for 2010.

1. For our Elementary tournament, we use Lego bricks almost exclusively. Extra items like paper clips or erasers are then added to the Lego structure.
2. We do **NOT** use color of the bricks in the scoring. We try to make all of the structures that the writers examine **exactly the same**, but there may some color variations from one to the next. The "doer" gets **exactly the same bricks** that his partner used (disassembled and placed in a bag), so these color variations should be completely irrelevant.
3. For the 2010 Tournament, **each team member** will spend the first 30 minutes acting as a writer then spend the next 30 minutes acting as a doer. Team members will start in separate rooms and examine different models. One will be a flat structure (like that described in Exercise #2 above), and the other will examine a Lego structure (as in Exercise #3 above).

