| Description | One student will write a description of an object and how to build it, and then the other student will attempt to construct the object from this description. |
| :---: | :---: |
| Time Limit | 25 minutes to write the directions, 20 minutes to construct the apparatus |
| Team Size | 2 Students |
| Details | The student is shown an object built from items such as straws, push pins, paper, Styrofoam balls, paper cups, popsicle sticks, Legos, K'nex, pipe cleaners, etc. <br> The competitor has 25 minutes to write a description of the object and how to build it. There is no advantage to finishing early. <br> $>$ The "writer" is not allowed to touch the device. <br> $>$ Only letters and numbers may be used. <br> $>$ The student may type their description if they have brought their own computing device to class. <br> $>$ All abbreviations must be defined either at the beginning or when the abbreviation is first used. (even distances) <br> > The teacher will pass the description you have written to your team member who will have 20 minutes to recreate (build) the original object. |
| Competition Scoring | The team that builds the object nearest to the original and has properly written instructions will be declared the winner. Points will be given for each piece of material placed in the proper location when compared to the model. <br> The overall points for this project will be between 40 and 60 points. <br> Time taken for the construction phase will be used as a tiebreaker. |
| Notebook Requirements | > Strategy Notes <br> > Practice Run Directions (2) <br> > Practice Run Analysis (1) <br> > Practice Run Score Sheet (1) <br> $>$ Notebook Points: 25 |
| Timeline | Practice Runs on: Competition Date: |



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## Write-It, Do-It Example Score Sheet (Partial)

## 112) Section 1: Basics \& South Quadrant

 Base is X-side Up$\qquad$ There is a Push Pin (PP) in the center of the $X$ This PP is green
$\qquad$ There is a PP in the bottom right corner
$\qquad$ This PP is blue It is on the line about 1 inch from the corner
$\qquad$ There is a paper clip near the bottom of the block
$\qquad$ It is on the short edge/side of the base
$\qquad$ Paper clip is unfolded once at the first outer bend
$\qquad$ Rest of the loop points straight up
$\qquad$ Pink bead is on paper clip
$\qquad$ It is put on correctly (see picture)

## (___/6) Section 2: Pipe Cleaner


$\qquad$ There is a pipe cleaner in the southern quadrant of the model
$\qquad$ Pipe cleaner goes from bottom right PP to center PP to paper clip
$\qquad$ On bottom right it is wrapped around metal part of PP
$\qquad$ Wrapped around plastic body of center PP
$\qquad$ Wrapped around paper clip on bottom (unbent) segment
$\qquad$ There is no overhang beyond either PP (Pipe cleaner ends at Pps)
(___/8) Section 3: Twine Array
$\qquad$ There is a PP in the center of the left quadrant
$\qquad$ This PP is red
$\qquad$ There blue twine pinned under the PP
$\qquad$ There is about $1 / 2$ inch extra twine beyond PP
$\qquad$ Other end of twine s pinned under center PP
$\qquad$ The twine is taut between the 2 pins
$\qquad$ There is a yellow dot sticker near the center
$\qquad$ It is entirely in the northern quadrant but as far south as possible

## /15) Section 4: Popsicle Stick Array

There are 2 toothpicks in center of northern quadrant
$\qquad$ Toothpicks are in line N/S with taller toothpick to the south
$\qquad$ There is a popsicle stick propped up on edge between the two toothpicks Stick is flush with base ~1 inch of popsicle stick extends to the right of the toothpick There is a clothespin clipped to the popsicle stick so that the open prongs point straight up Clothespin is about half way along length of popsicle stick.
$\qquad$ There is a balloon on the clothespin


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