Write It Do It Prelim Test

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Welcome to the Write It Do It Prelim Test! As you may have noticed, this test is not actually in the same format as the actual competition Write It Do It, because that would be too much of a hassle. Instead, this test evaluates several skills that are important for success in Write It Do It.

List partners that you would like to be on a WIDI team with on the lines below; keep in mind that we may not be able to guarantee that you are with these people.

TOTAL 175 pts
Part I: Spatial Reasoning (TOTAL 40 pt)

For each of the following cube designs, identify the cube that could not be created by folding the pattern. (TOTAL 19 pt)

1. D (3 pt)
2. C (3 pt)
3. B (4 pt)
4. D (3 pt)
5. B (3 pt)
6. A (3 pt)

For each of the following unfoldings, determine which shape the pattern makes. (TOTAL 21 pt)

7. A (2 pt)
8. B (3 pt)
9. B (4 pt)
10. D (3 pt)
11. C (4 pt)
12. D (5 pt)
Part II: Identification (TOTAL 10 pt)

Write the name of each of the following items.

____________________Bobby pin (2 pt)____________________

____________________Thumbtack / pushpin (2 pt)____________

____________________Toothpick (2 pt)____________________

____________________Clothespin (2 pt)____________________

Mini-Toober (2 pt). Give 1 pt if they mention proteins/Protein Modeling

Part III: Rules (TOTAL 9 pt)

Indicate whether or not each of the following excerpts would result in a penalty/DQ.

|  | Penalty | No Penalty |
|----------------|----------------|
| "bend the pipe cleaner into a S shape" | (2 pt) |
| "Take a red pink paper clip" | (1 pt) |
| "Draw a line of this length: " | (2 pt) |

How many minutes are allowed for writers? __25 min__ (2 pt) For doers? ___20 min__ (2 pt)
Part IV: Codes (TOTAL 38 pt)

Use the space below to describe a code for Legos. Feel free to use visuals to help explain.

RUBRIC

idk this is kind of subjective, just be consistent when grading kthx

Total: 18 pt

Identification 8 pt
- 1 pt: mentions color
- 2 pt: clear syntax for dimensions identification
- 3 pt: clear syntax for orientation
- 2 pt: clear syntax for thin vs thick Legos

Connections 10 pt
- 4 pt: clear syntax for stud identification/enumeration
- 3 pt: clear syntax for connecting Legos
- 3 pt: says something about the holes on the bottom of the Lego pieces

Now, use your code to describe the Lego structure below:

Rubric (grade according to their instructions)

TOTAL 20 pt

White Lego (2 pt)
- 1 pt: studs up
- 1 pt: bottom of structure

Blue Lego (3 pt)
- 1 pt: connected to white
- 1 pt: on top of white
- 1 pt: connected at correct place
Orange Lego (3 pt)
- 1 pt: connected to blue
- 1 pt: on top of blue
- 1 pt: connected at correct place

Yellow Lego (5 pt)
- 1 pt: connected to orange
- 1 pt: on top of orange
- 1 pt: connected at correct place
- 1 pt: rotated 45 deg
- 1 pt: rotated correct direction

Following Code (7 pt)
- 4 pt: identified each Lego correctly according to their code
- 3 pt: identified connections according to their code
Part V: Write It (TOTAL 37 pt)

For each of the builds below, write a description on the lines provided. Make sure to be specific.

1.

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**Mega Blok <3 pts>**
- 0.5 pt: Mega Blok (MB) stated as Mega Blok
- 0.5 pt: MB stated as red
- 1 pt: MB studs are up

**Pencil <3 pts>**
- 1 pt: pencil is in the front left/southwest hole <if they didn't do this but did specify which hole, adjust rubric accordingly>
- 1 pt: pencil eraser is up
- 1 pt: "Ticonderoga" on pencil faces left/west

**Pipe cleaner <10 pts>**
- 0.5 pt: pipe cleaner (PC) stated as pipe cleaner
- 0.5 pt: PC stated as pink
- 1 pt: PC twists around pencil
- 0.5 pt: PC starts at bottom of pencil eraser/boundary btw eraser and metal
- 0.5 pt: PC starts on the right side
- 1 pt: PC twists in counterclockwise direction (as viewed from top, be lenient on this one)
- 0.5 pt: PC does 3 wide twists
- 0.5 pt: wide twists are evenly spaced
- 0.5 pt: wide twists end about 3/4 down the pencil (3/4 of the way from the top)
- 0.5 pt: wide twists end on the southeast/front right side
- 0.5 pt: PC does 3 tight twists
- 0.5 pt: tight twists end on the south/front side
- 1 pt: PC extends out after tight twists
- 1 pt: PC bends 90 deg up at halfway point of remaining PC (idk this is hard to describe, once again be lenient)
- 1 pt: PC extends to above the spot between the two studs on the left
  ----- give 0.5 pt if they only said it goes to the right/east

Sticky note <4 pts>
- 1 pt: sticky is stated as red
- 1 pt: sticky on front side of MB
- 0.5 pt: sticky part is on the left side
- 0.5 pt: left end concurrent with left edge of front side of MB
- 1 pt: sticky is centered vertically

2.

TOTAL: 17 pt

Cup <1 pt>
- 1 pt: cup mouth faces up
Binder clip <3 pt>
- 0.5 pt: binder clip (BC) stated as binder clip
- 0.5 pt: BC stated as black
- 1 pt: BC clipped onto right/east edge of mouth of cup
  ---- award 0.5 pt if they only said right side of cup
- 1 pt: wires folded up

Dowel <4 pt>
- 1 pt: point up
- 1 pt: rests on cup on left/west side of cup
- 1 pt: flat end dowel rests on ground/floor/table whatever
  ---- award 0.5 pt if they only said "dowel" without specifying which end is on the ground
- 1 pt: touches cup about 2/5 of the way from the bottom

Rubber band <2.5 pt>
- 0.5 pt: rubber band (RB) stated as green
- 1 pt: rubber band wrapped around flat end of dowel
  ---- award 0.5 pt if they only said wrapped around end without specifying which end
- 0.5 pt: rubber band wraps around dowel 10 times
- 0.5 pt: rubber band covers 1/5 of dowel

Sequence (the important part!!) <6.5 pt>
- 3 pt: writer says to clip BC onto cup before resting dowel on it
- 3 pt: writer says to wrap RB around dowel before resting dowel on cup
- 0.5 pt: writer notes that it might fall over (because it does)

fun fact: this build is impossible in real life because the cup falls over lol. I put something inside the cup but that should not be graded.
Part VI: Do It (TOTAL 38 pt)

Using the empty box on the cover page, follow the directions below. (TOTAL 28 pt)

FOR EACH DIRECTION, check the underlined items below. Give \( \frac{1}{2} \) pt per bolded item if they got it.

1. Draw a line from the top left corner to the middle of the right side. (1 pt)
2. Draw a line from the top left corner to the middle of the bottom side. (1 pt)
3. Draw a line coming from the bottom end of the line from step 2, going straight up. (1 pt)
4. Draw a circle around the point where the line from step 1 and the line from step 3 meet. (1 pt)
5. From the circle in step 4, draw an arrow pointing northeast. (1.5 pt)
6. Draw a line from the point where the line from step 1 and the line from step 3 meet to the middle of the line from step 2. (1 pt)
7. Draw a line from the point where the line from step 1 and the line from step 3 meet to the bottom right corner. (1 pt)
8. Draw a squiggly line from the middle of the line in step 7 to the right end of the line from step 1. (1.5 pt)
9. The squiggly line from step 8 cuts a triangle in two. Draw a square in the bottom part of this triangle. (1 pt)
10. Lightly shade the bottom part of that triangle, except for the square you just drew. (1.5 pt)
11. The circle from step 4 should be split into six slices. Going clockwise from the upper right slice, follow this pattern: shade, shade, don’t shade, shade, don’t shade, don’t shade. (3 pt)
12. Draw a line from the bottom left corner to the point \( \frac{2}{3} \) of the way down the line from step 2. (1 pt)
13. In the smaller triangle formed by step 12, write “ABRHS”. (1 pt)
14. In the larger triangle formed by step 12, draw five stars in a circle. (1.5 pt)
15. Connect the five stars. (0.5 pt)
16. In the top right corner, make a smiley face. (1 pt)
17. Around the smiley face from step 16, draw a quarter circle. (1 pt)
18. In the bottom right, above the bottom edge, make a jagged line, and above it write “scioly rules”. (2.5 pt)
19. Draw a small fish above the “rules” from step 18, and lightly shade it in. (2 pt)
20. Draw a line from the fish in step 19 to the bottom right corner of the square from step 9. (1.5 pt)
21. Make an X on the line from step 20, \( \frac{2}{3} \) of the way from the fish. (1.5 pt)

That’s it! You’re done.

Below, list five things that could be improved/clarified from the directions above. (TOTAL 10 pt)

Two points each

possible answers below
could overall be more organized
3. how far up
4. How big is the circle, is it centered on the point
5. From where on the circle, how long is the arrow
4,6,7: give the "point where the line from step 1 and the line from step 3 meet" a name to make it easier
9,10. Needs more specificity
9. how large is the square, what orientation is the square
12. 1/3 of the way in which direction?
13. what orientation, what size, where in the triangle
13,14. once again be more specific with identifying triangles. There are triangles everywhere
14. where, how big, how spread out, what orientation
15. in what way (only the outer edges, all connections, random connections etc)
16. needs more specificity!!! (with or without nose, face, orientation, size etc)
17. how big, in general just be more specific
18. orientation, length, size, number of jags etc
19. direction facing?
20. where on the fish
21. size, again