Station 1 Bimanual Coordination-Writing Task
No Question

Station 2

Q1) The dominant hand tends to take on the role of mobility. For example, the dominant hand will tend to provide the twisting motion when opening a jar, regardless if it is grabbing the lid or the jar or holding onto the jar itself.

Q2) In some more complex tasks there is a difference in performance, but in most simple tasks that only involve simple moving and manipulation of objects you may not see a difference.
Station 3

Q1

Subjects	Large Width	Small Width
Jacob	7.6	13.8
Jesse	7.89	15.15
Gryphon	11.79	23.6
Paulo	9.50	15.06

Q1 cont) There is a noticeable difference in when comparing trials while also having larger differences in speed when scores are compared in for the small width as well. This has to deal with hand-eye coordination. Without the proper dexterity one cannot perform the task at high speed. What also makes this challenge even more difficult is that some people have to look at each hand before placing the thumbtacks down rather than relying on peripheral vision to place tacks correctly thus inflating a subjects time trial even more.

Q2)

Target	Distance	Width	Index of Difficulty
Post-It Note	10cm	7.62cm	-.9928
Rings	10cm	1.5cm	.849
Bottle-Cap	10cm	2.97cm	.407

Station 4 (Gryphon)

Coordination Finger to Nose

Dysmetria= overshoot or undershoot a target

Activity #1: put cap back on the pen, alternated using left hand and right hand for putting cap back on the pen

Activity #2: Arms out at “T” position, finger-to-nose, alternating which hand and which finger returning to touch the nose. Repeat with eyes closed. Then do heel-to-toe, with doing the task, similar to sobriety test.

Question #2a: you’re not looking at hand-eye coordination, because you aren’t using your vision...which sensory system are you using then?...vestibular.

Question #3a: Senses and why is finger to nose a good test for sobriety?... because your cerebellum and coordination are needed for the sobriety test, however, if they are impaired, then the finger to nose testings will definitely be a good test to show that you are impaired physiologically.

Station 5 (Gryphon)

Social Coordination

Arms and legs in sync with a partner while walking. Hypothesize why people tend to coordinate with each other while walking…...they mirror what they see when they are close to their partner or to the person they are talking to, also short people attempting to keep up with tall people, and also likely tend to coordinate while walking due to stride length.

Station 6
Q1) In the cognitive stage we tend to be more accurate to get the skill down. Our speed is maintained at a very slow state. In the associate stage, it is split 50/50. We choose to be more accurate and at a faster pace than the cognitive stage. In the autonomous stage, since the skill is already there, we want to go at a much faster pace. The trade off would favor the speed side. You become less accurate the more skilled you are because you want to go much faster.

Q2) Hiking in Fern Canyon. Because so many trees have collapsed on the trail, you have to take your time walking through the trunks and branches. Being more accurate with every step. If you were to go fast, this would most likely lead to an accident.

Station 7

Q1) A pencil would require a very tripod grip. There is more precision comparing a pencil to a barbell. A barbell would require a hook grip. With the pencil we are only using three fingers, in contrast the barbell requires all 5.

Q2) A pencil would require a tripod grip. The stick would require a cylindrical grip. The wrist would still in pronation for both objects. Depending on how big the stick is, I believe that both objects would require 2-3 fingers to hold.

Q3) When the handle is facing towards you, there is a hook grip and slight supination of the wrist. When the handle is facing away from you, there is a hook grip and slight supination of the wrist. But, there is also wrist flexion. The flexion allows you to actually grap the cup when it is not facing you.

Station 8

Q1) There are many small steps in coordination that are required to open a door effectively. The arm must reach out to the doorknob accurately. Then the fingers must grasp onto it according to its shape. Once the grasp onto the doorknob is sufficient, you must then twist at the hand (or manipulate the door handle in the way it is intended to). Once the grip and turn are each sufficient, you can then apply pressure to open the door.

Q2) A doorknob, is usually approached with a palm sideways grip. A horizontal handle would normally be approached with a pronated or supinated palm. A turnable door handle would generally be approached with a pronated palm.