

# Individual Skills tests

Tuesday, February 11, 2020 10:16 AM

## Microscope and Camera

Excel

Vernier

Micropipettes

Glassware

## Scaffolding -

I explain and demonstrate

They practice and give each other feedback

The test when they choose - pass/fail

Want to develop a skills progression matrix - something like the following that students can use

Unconsciously Incompetent - Don't know what you don't know

Consciously Incompetent - Know what you don't know

Consciously Competent - You can do it, but have to think about it

Unconsciously Competent - You're so good at it that it can be done on "autopilot" without requiring active attention

Right now I would say my "skills tests" test for a low level of Consciously Competent

quiz will be similar to the image below– (this version shows the completed spreadsheet)

	A	B	C	D	E	F	G	H	I	J
1										
2	1. Insert a row above of this one.							1		alexander
3	2. Sort the numbers to the right from lowest to highest							2		billy
4	3. Alphabetize the names in column to the right.							4		esther
5	4. In the cell below, insert a formula for the average of the numbers in the column to the right.							8		jack
6		=AVERAGE(H2:H10)						10		lucile
7	5. Adjust the number in the cell below so that it shows four decimal places.							18		mac
8		3.1416						22		manny
9	6. In the space below, build a spreadsheet for calculating Calories per gram like the one we used in class.							24		trevor
10	Enter values that come from measurement (temp, mass, volume) to confirm that your formulas work.							33		walter
11										
12	<b>Water Volume</b>	<b>Start Temp</b>	<b>Ending Temp</b>	<b>Temp Difference</b>	<b>calories</b>	<b>Start Mass</b>	<b>End Mass</b>	<b>Mass Change</b>	<b>cal. per gram</b>	<b>Cal. per gram</b>
13	50	20	24.5	=C13-B13	=D13*A13	2	1.8	=F13-G13	=E13/H13	=I13/1000

## Microscope Skills

Make a Wet Mount

Get something under focus on high power

Use the camera software to measure the size of an object

Get out and put away the microscope