YOU MUST TURN IN YOUR DATA TO GET A GRADE FOR PROJECT 1!

Each group must create a datafile in Excel that contains all of your data in the proper format so that it can be automatically uploaded to a database where your data will be shared. After you submit your data file it will be reviewed and either accepted or returned to you for revision. After acceptance of your data file both partners will receive 15 points.

How do you make a properly formatted datafile?

1. Download the template data file (F13BIO211CURE_TEMPLATE.xls) from the unPAK website
    a. Go to www.arabidopsisunpak.org
    b. Go to the "Education" page
    c. At the bottom of the page click on "Template for Data Submission." This will download a .xls file to your computer which can be opened in Excel.

2. Fill in the file with your data
    a. BEFORE YOU ENTER ANY DATA YOU MUST FILL IN YOUR METADA SHEET – **ALL CELLS HIGHLIGHTED IN YELLOW ARE REQUIRED**. The first worksheet in the Excel file is a metadata sheet where you must fill in information about what traits you measured and how you measured them.
        i. First, fill in the top two tables – one is for traits measured at the first timepoint (when you measured rosette diameter) and the second is for traits measured later on (when you measured fruit number).
        ii. List the traits you measured and corresponding trait codes, units, and unit codes. The chart below includes trait codes, etc for all of the traits measured by Fall 2013 BIO 211 students. (Note: if your trait is not on this list, contact your instructor)

TRAIT DESCRIPTION	TRAIT CODE	UNITS DESCRIPTION	UNIT CODE
Rosette diameter on date measured	rdiam.snapshot	millimeters	mm
Number of fruits on date measured	fruitnum.snapshot	individual fruits	individual fruits
Number of rosette leaves on date measured	rleafnum.snapshot	Individual leaves	Individual leaves
Plant height on date measured (first measurement date)	height.snapshot.early	centimeters	cm
Plant height on date measured (second measurement date)	height.snapshot.late	centimeters	cm
Total number of branches on date measured	totalbranch.snapshot	# of leaves	Individual branches
Presence of flowers on second measurement date	flowers.present.late	Presence of flowers (Y/N)	identity
Number of days until bolting	days.to.bolt	Days	days
Number of cauline leaves on date measured	cauline.leafnum.snapshot	Individual leaves	Individual leaves
Presence of trichomes on leaves	trichomes.present	Presence of trichomes (Y/N)	identity
Length of the longest rosette leaf on date measured	longest.leaf.length	Millimeters	mm
Is plant wilted on date measured	plant.wilted	Wilted (Y/N)	identity
Bolted by early measurement date	bolt.by.date.early	Presence of bolt (Y/N)	identity

b. Next, at the bottom of the document select the tab for the worksheet titled "DATA."

c. **Each row should represent a single data point** – in other words, one row represents one trait measured for one plant. (*See the example spreadsheet on the next page*)

d. Below are explanations of what to enter into the cells under each column heading. For many columns, what is entered will be the same in every row. An * indicates information that your instructor will provide.

   i. *Experiment: Code describing the experiment name, every row will be the same
   ii. *Institution: A code for the institution the experiment was conducted at
   iii. *Facility: Location within that institution where the plants were grown.
   iv. *Treatment: What treatment the plant being measured was subjected to.
   v. *Accession: The name of the plant line (SALK_XXXXXC or CSXXXXX)
   vi. *Plant ID: The plant # code/growing location code
   vii. Trait: A code that describes the trait that was measured *(see directions on page 1).* Clicking on a cell in this column will reveal an icon with two arrows, click on it to reveal a drop down list of options to choose from.
   viii. Value: The trait value measured (for example, enter "99" if 99 fruits were counted for that plant)
   ix. Units: The units the traits were measured in. Choose the correct units from the dropdown menu.
   x. Date measured: The date the traits were measured (enter in format mm/dd/yy)
   xi. Name: The first and last names of both group members separated by a semicolon
   xii. Comment: Any relevant comments *(notes about damaged or missing plants for example).*

e. ***Fall 2013 CURE Information:**

   i. Experiment ID: F13_211CURE
   ii. Institution: CofC
   iii. Facility: GC5 (short for "Growth Chamber 5" which was set to 20C) or GC6 (Growth chamber 6, which was set to 24C).
   iv. Treatment: Either 20 or 24
   v. Accession and Plant ID can be found on your handout

f. There is a third spreadsheet in the Excel document named "Codes" – do not change anything on that sheet. It is used to generate the drop down lists.

3. Save your datasheet as a new file
   a. Save the file as "F13BIO211CURE_Student1LastName_StudentTwoLastName.xls"
      i. Note: be sure to save your file as a .xls file, **not .xlsx**

4. Submit your data
   a. There will be a dropbox on OAKS where you can submit your finished datafile. Your instructor will tell you when your groups data must be submitted by.

Example Spreadsheet:

Below is an example spreadsheet showing two traits (rosette diameter and fruit number) measured for four plants (Plant 1 – SALK_99999C grown in high salt; Plant 2- SALK_888888C grown in high salt; Plant 3 – SALK_99999C grown in tap water; Plant 4 – SALK_888888C grown in tap water).

Accession and **Plant_ID:** can be found on your handout

Trait: select the code of the trait measured

Value: enter the value of the trait measured for that plant

Name: Enter both group members names, separated by a semicolon.

Contact: For Fall 2013 ignore this – we no longer ask you to provide contact information

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Experiment	Institution	Facility	Treatment	Accession	Plant_ID	Trait	Value	Units	Date_Measured	Name	Contact	Comment
2	S13_211CURE	COFC	NGH	high salt	SALK_999999C	1	rdiam_snapshot	14.2	mm	1/1/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
3	S13_211CURE	COFC	NGH	high salt	SALK_888888C	2	rdiam_snapshot	13.1	mm	1/1/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	plant damaged while measuring
4	S13_211CURE	COFC	NGH	tap	SALK_999999C	3	rdiam_snapshot	12	mm	1/1/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
5	S13_211CURE	COFC	NGH	tap	SALK_888888C	4	rdiam_snapshot	9	mm	1/1/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
6	S13_211CURE	COFC	NGH	high salt	SALK_999999C	1	rdiam_snapshot	100	individual fruits	1/30/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
7	S13_211CURE	COFC	NGH	high salt	SALK_888888C	2	rdiam_snapshot	99	individual fruits	1/30/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
8	S13_211CURE	COFC	NGH	tap	SALK_999999C	3	rdiam_snapshot	75	individual fruits	1/30/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
9	S13_211CURE	COFC	NGH	tap	SALK_888888C	4	rdiam_snapshot	80	individual fruits	1/30/13	John Smith; Lisa Simpson	smithj@cofc.edu; simpsonl@cofc.edu	
10													
11													
12													
13													
14													
15													

rdiam_snapshot
rleafnum
fruitnum_snapshot
height_snapshot
totalbranch_snapshot

Experiment Code, Institution and **Facility**: Type in once then copy and paste (or drag down to fill) into all cells

Treatment: select treatment plant was grown in from drop down list

Units: select the unit code of the trait measured from the list

Date_Measured: enter the date the measurement was taken (in the form mm/dd/yy)

Comments: include any information about the plant or the measurement taken. It is not necessary to fill out comments for every row