ScienceBridge Tech Site Standard Operating Procedure

Title: Sorting & Labeling mussel shells		
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Scope	For use by biotechnology students at the ScienceBridge tech sites when sorting mussel shells for the ScienceBridge Ocean Acidification kits.			
Objective	This SOP sets the procedural specifications for sorting mussel shells			
Materials		1 kit	50 kits	100 kits
	1. Whole mussel shells (clean and dry) 2. pre-labeled Sandwich-sized bags	20 10	1000 500	2000 1000
Equipment	1. Sharpie	1	4	8
Safety	Handle mussel shells with care. Broken shells may be sharp and should be disposed of in the broken glass container.			
Quantity	100 bagged shells should be completed (200 pairs of shells) or until you fill the "shells ready to be massed" bin.			

Protocol

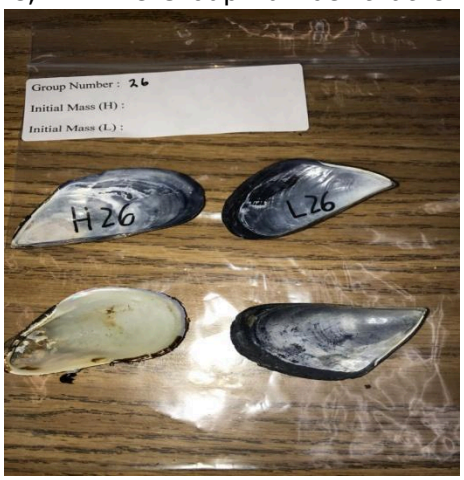
Note: Use same "shells ready for sorting" bin until it is empty before moving onto next bin.
Shells are fragile, handle with care to prevent loss.

Sorting:

1. Arrange whole mussel shells along the lab bench by size (lined up, smallest to largest).
   a. 
2. Starting at one end, package two whole mussel shells (four halves, okay if not still connected) of similar size into one pre-labeled sandwich bag.

Labeling:

3. Choose any shell bag that already contains 4 shell halves (can be connected) and has a numbered mass label on the bag. .

	4. Choose any pair of the mussel shells (2 halves). It is recommended to pick the ones with the lightest or whitest background for better labeling visibility. a. Using the fine tip Sharpie label the **lightest part** of the shell "H#" (H= High Exposure, #= The group number that is labeled on the bag) b. On the second mussel shell label it with "L#" (L= Low Exposure, #= The Group number that is labeled on the bag. i.  ii. Do not label the other pair of mussel shells 5. Make sure all 4 shell halves are in the bag and squeeze out all the air before sealing. 6. Repeat steps 3 - 5 for each bag that has been sorted. **7. QC: Gather 10 sandwich bags with labeled shells. Choose 2 bags and double check:** **a. 4 shell halves of similar size (unlabeled shells may still be connected)** **b. 2 shells have the same # as the # on the bag** **c. One labeled shell has an "H" and the other has an "L"** d. **Writing of the Letters and numbers are large, clear, and in the white part of the shell.** 8. Label a gallon bag with "Shells NOT pre-treated" 9. Take all 10 bags that have passed QC and place them in the labeled gallon bag. 10. Place completed gallon bags in the "shells ready for massing" bin.
Documentation	**All work and any variance from the protocol must be documented** Record the number completed and the number left to complete in your communication log
Storage	**Product Storage** • Place bagged shells into "Shells ready for massing" box in room 224 A. **Supplies Storage Locations** • Gallon sized bags are in the enzyme cabinet. • Unsorted shells are in room 224A in the box "shells ready for sorting" • Place unfinished bags in the "shells ready for sorting" bin.

Quality Control	(Include here what to do if it does not meet the QC step(s) in your protocol)
When	Whenever the “Shells ready to be massed” box is less than half full.
Tech Site Kit: Group	Ocean Acidification: Facilities Management