

Name \_\_\_\_\_

## STEM Engineering Levels:

### Marine Debris Device

N	G	S	M
Novice Engineer (7 points)	Growing Engineer (8 points)	Skilled Engineer (9 points)	Model Engineer (10 points)
Criteria is not attempted or is attempted incorrectly	Criteria is attempted correctly, and there is room for improvements with the results.	Criteria is attempted correctly and met accurately.	Criteria is attempted and met accurately and in an exemplary way that serves as an example for other engineers.

This is your assessment for your Marine Debris STEM engineering challenge. As engineers, growing and improving is very important so that we can become skilled and model engineers.

Marine Debris Device STEM Engineering Challenge Criteria	Engineering Level
<b>Ask</b> – Ask and answer questions to define the challenge, criteria, constraints. Consider what makes your design strong and effective.	
<b>Imagine</b> – Brainstorm ideas to generate and compare multiple possible solutions to meet the design challenge. Discuss different ways to construct the design.	
<b>Plan</b> – Choose one design and create a plan	
<b>Create</b> – Create a device using the materials available. It should meet the design criteria (separate sand from microplastics) and also adhere to the constraints for time and materials.	
<b>Test</b> – Conduct the test carefully by sifting the sample sand and measuring the amount of microplastics collected. Accurately record results of the test.	
<b>Improve</b> – Consider multiple possibilities for improvement	

Grade: \_\_\_\_\_

Comments: \_\_\_\_\_