

Activities Days 6 – 13	
Activity #1	Making Waves and Tides
Time	Two 45 min sessions at least
Materials	<ul style="list-style-type: none"> • one clear water bottle for each student, blue food coloring, small shells or trinket, lots of baby oil, cooking oil, Dawn detergent fan, water, aluminum pan, premade wave bottle in a 2L bottle for the teacher • internet access
Guiding Questions	
<ol style="list-style-type: none"> 1. What causes waves? 2. What are tides? 3. How does the ocean move? 	
Plan	
<p>Part 1 of the activity: Wave demonstration- place water in a pan with a fan going across it on low, change the speed to high- discuss what the students observe happening</p> <p>Students will create a wave bottle. Have students draw their wave bottles in their notebooks. Have a wave bottle made to model for the group- what happens if detergent or cooking oil is added-use the teacher's model not the students' so theirs is not ruined. Discuss what happens to the wave.</p> <ul style="list-style-type: none"> • Guiding Questions to ask during this part of the activity: How does the wave move? What does the movement remind you of? What happened once the cooking oil was added? How do you think this would effect the ocean water? The creatures in it? <p>Part 2 of activity: Tides- show students images of the Bay of Fundy and how drastic the tides are there, at least a 30 foot difference</p> <p>Gizmo on Tides (there are 2 students may have time to go thru both); Discourse about gizmo; write reflection about how tides form. Research on tidal energy at: http://www.renewablegreenenergypower.com/tidal-energy-tidal-power-facts-for-kids/</p> <ul style="list-style-type: none"> • Guiding Questions to ask during this part of the activity: what causes tides and what does high tide/low tide look like? How would tides make in difference in being able to develop resources at the coast? 	
Differentiation	<ul style="list-style-type: none"> • Give written step bt step directions if needed
ELL Modification	<ul style="list-style-type: none"> • Shows pictures of waves and high/low tide with vocab words
Check for Understanding	Listen to responses to questions, read responses in notebooks, listen to discourse