



## DRIFTING APART



### Student tasks for Fundy Trail:

**A**

**Hike down to the viewing area of the flowerpot rock.** Note the time and the tide level. Is the flowerpot rock exposed or covered in water? Draw a picture showing what portion is exposed with the time noted. If possible, return at the end of your visit to the Fundy Trail and fill in a second picture noting how much time has elapsed. Describe the change.

A.

B.

### General instructions to students:

1. Note the main RISKS at the site when you arrive, especially tide times and falling rocks.
2. Respect the geological code of conduct at all times; do not feed or disturb wildlife, close gates, do not remove rocks/fossils or sand from the site.
3. Before leaving for the site ensure you have suitable clothing and footwear and the equipment to record your field observations:
  - a. Pencils
  - b. Clipboard
  - c. Task sheet
4. Stay close to your teacher/supervisor at all times.
5. Try and complete your observations in as much detail as possible. Listen to the teacher as they explain what you are looking at and ask questions if you are unsure about any aspects of the site.

**E**

**Visit Long Beach.** When you arrive, working quickly, place a tall marker at the water's edge. Every 15 minutes, return to it and note any changes in the tide (is the marker getting wetter or drier? Is the tide coming in or going out? How fast is the tide changing?)

○

OBSERVATIONS (15-minute intervals)	
1	
2	
3	
4	

**F**

**At Long Beach,** make a beach sediment mini-museum exhibition. Find and display rocks of all different sedimentary grain sizes from tiny clay or mud particle to silt, sand, gravel, pebble, cobble and boulder. Include a model to show their place in the rock cycle.

**G**

**Fossil task:** Lizard footprints have been found in this age and type of rock in the St. Martin's area, slightly older than the dinosaurs. Trace fossils are an important part of the study of evolution as they show us how animals that are now extinct once walked, burrowed, etc. In the sandy part of the beach, create some interesting imprints that could become future fossils. Sketch or photograph your future trace fossil and describe what information it could give when discovered far in the future.

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**Need Trace Fossil Photo to be supplied**

**NBM-MNB ?**

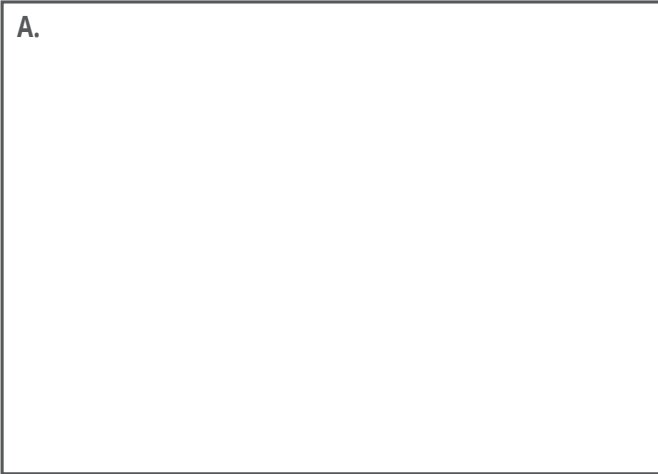
**Student illustrations:**

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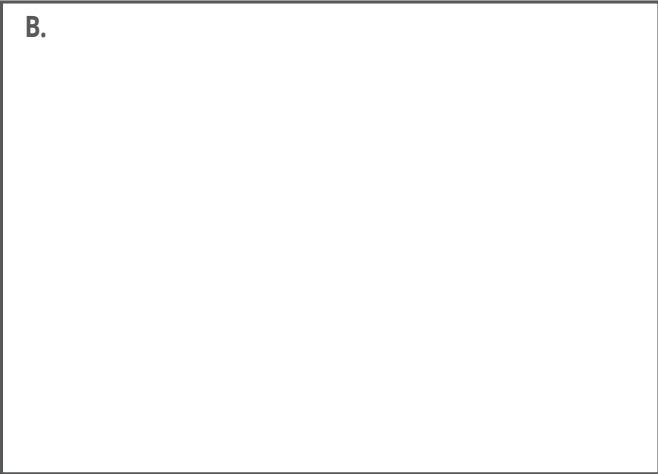
**B**

**Still at Flowerpot Rock**, draw a view from above the coastline in Box A. Note how the shoreline, especially the flowerpot rock itself, has been shaped by physical erosion. In Box B, make a drawing reversing the erosion to show what the coastline might have looked like when the flowerpot rock was still fully connected to land. Write about what happened to all that rock which used to exist.

A.



B.



Where did all that rock go? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**C**

**At any point on the Fundy Trail**, discover the exact locations of 3 other Drifting Apart countries on a map. What compass direction is each one from the Fundy Trail? Onsite, use a compass to point across the water in the correct direction for each of the three sites you found. Mark and lay down stick direction markers on the trail to point them out.

	DRIFTING APART COUNTRY NAME	COMPASS DIRECTION FROM ST. MARTIN'S AND FUNDY TRAIL
1		
2		
3		

**D**

**At Melvin Beach or elsewhere on the Fundy Trail**, sketch an example of the bedding in an interesting sedimentary rock formation you find. As a geologist, you would record the strike or angle off the horizontal for a geological map. Are the layers in the bedding still flat to the ground or have earth forces over the millennia thrust them over? Use a homemade clinometer to record the angle or strike.



Strike angle:  
 \_\_\_\_\_