

**Day in the Life of the Hudson River 11/12/17 Data
(Salt Front ~ RM 65)
RIVER MILE -7**



**Fort Wadsworth Park, Gateway National Recreation Area, Staten Island
Kathy Garofalo, National Parks Service
Also helped by DEP, Coast Guard, Fire Dept, SCA**



**Mary Lee, St. Clare's School, 70 Seventh graders and 10 adults
N 40. 599564 W-74.053616**



Photos Courtesy of Michelle Mustari Photography

Location: Seabee Fishing Beach, Fort Wadsworth, just south of the Verrazano Bridge, Staten Island

Sampling Site: Beach area with bulkhead, Shoreline is 50 % beach, 50% forested, Fort on site

Surrounding Area: Beach with riprap, concrete broken in area, pier nearby, behind beach covered with vegetation

Water Depth: 2-4 ft.

River Bottom: sandy

Plants in area: No plants

<i>ITEM</i>	<i>Time</i>	<i>Readings</i>		
Physical				
Air Temperature	10:30 AM 10:56 AM 11:19 AM 11:42 AM 11:56 AM	16.7°C 16.7 17.2 17.2 20	62°F 62 63 63 68	
Wind Speed	Throughout AM - NE	Beaufort 3 - 4	Anemometer 12.76 mph	Wind speed range 10.4-16.0 mph
Cloud Cover	Overcast >100 %	Remained overcast all day		
Weather today	No rain	Rained overnight 0.05 inches	Water surface	Choppy
Weather recently	Monday (10/9) 0.26 inches rain and 72 F Tuesday (10/10) 83 F Wednesday (10/11) 0.5 inches of rain overnight and 76 F			
Water Temperature	10:50 AM 11:04 AM 11:30 AM 11:41 AM	17.8 °C 18.3 18.3 18.3	64°F 65°F 65°F 65°F	
Turbidity Turbidity tube	11:23 AM	27 cm 27.2 24.2	26.13 cm avg	
Chemical	Time	ppm	Temp	% Sat
DO – chemmets	10:50-11:41 AM	7 ppm	18° C	70%
pH indicator solution	10:50-11:41 AM	8.2 X 3	8.2	
Salinity - hydrometer	10:50-11:41 AM	26 ppt 27 28	27 ppt	
Nitrates	11:04 AM	0 ppm X 3	0 ppm	
Nitrites	11:04 AM	0 ppm X 3	0 ppm	
Ammonia	11:04 AM	0.5 ppm X 3	0 ppm	
Phosphates	11:04 – 11:41 AM	50 ppb X 3	50 ppb	

<i>Fish Catch – seine 10 ft. net – 5 pulls no fish</i>	<i>Number</i>	<i>Species</i>	<i>Size Across</i>	
<i>Macroinvertebrates</i>	1	Lady crab	8 cm	
	1	Scud	1.25 cm	
	2	Asian Shorecrabs	5 cm	
	24	Mole Crabs	1.5 cm	
	*NOTED Red Algae in the pull			
<i>Tides (from pier to water)</i>	<i>Time</i>	<i>Rising/Falling</i>	<i>Height in cm</i>	<i>Rate of change</i>
	10:33 AM	Unchanged	10 cm	baseline
	10:48AM	Rising	10.8 cm	.05 cm/ min
	10:58 AM	Rising	27 cm	1.7 cm/min
	11:13 AM	Rising	34 cm	0.5 cm/min
	11:40AM	Rising	35 cm	0.04 cm/min
	Lost stick			
<i>Currents - Time</i>	<i>Cm/30sec</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>Ebb/Flood</i>
10:38 AM	0 cm	0	0	- still
11:08 AM	70 cm	2.3	0.5	N - flood
11:25 AM	660 cm	22	0.43	N - flood
11:48 AM	590 cm	19.7	0.38	N- flood
<i>Core Sample</i>	<i>Length</i>	<i>Abundant</i>	<i>Common</i>	<i>Rare</i>
3 ft. of water	25.4 cm	Sand	Gravel Pebbles	OysterShells Macroinvert.
<i>Shipping – Commercial Time</i>	<i>Type</i>	<i>Name</i>	<i>Color</i>	<i>Direction</i>
10:20 AM	Cruise	Viking Sea	North	Loaded
10:39 AM	tugboat		North	Light
10:45 AM	passenger		North	Light
11:33 AM	Pilot	(white)	North	Light
11:41 AM		Sea streak	South	Light
11:51 AM		NR	South	Light
12:10 PM		Tankin	South	Light

A Day in
the Life
of the
Hudson

Cloudy Skies

October
2017

Verrazano
Bridge

Fort
Wadsworth

Vegetation

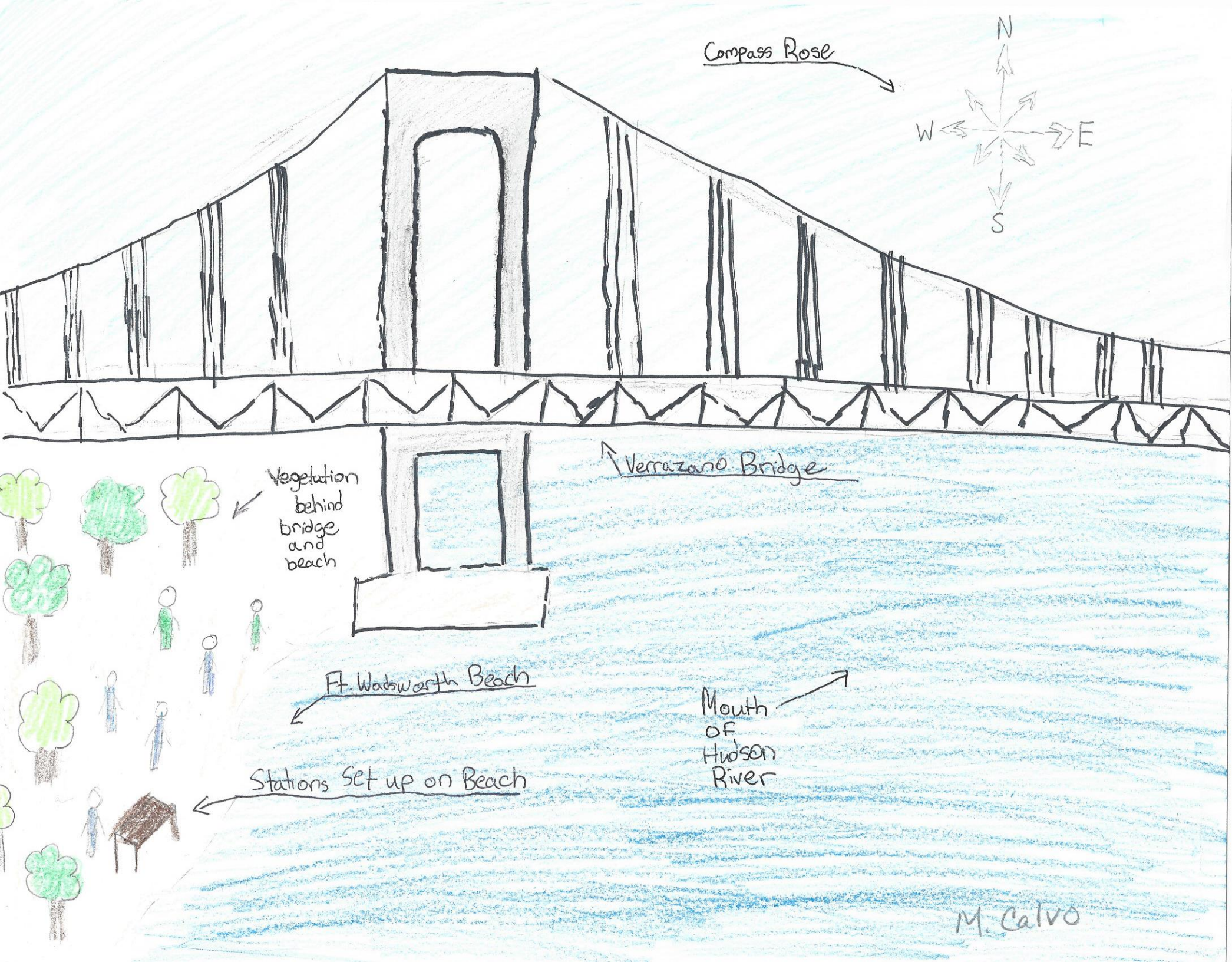
Beach

Atlantic
Ocean

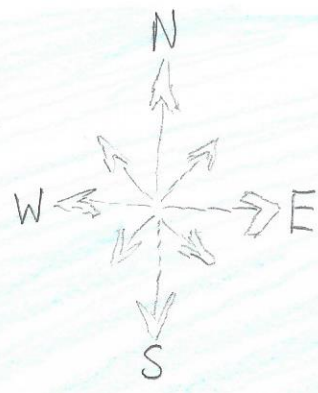
Table!

M. Ramas





Compass Rose



Verrazano Bridge

Vegetation behind bridge and beach

Ft. Wadsworth Beach

Stations Set up on Beach

Mouth of Hudson River

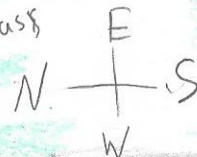
M. Calvo

Brooklyn



Brooklyn Sky line

Compass



Mouth of the Hudson River

Verrazano Bridge



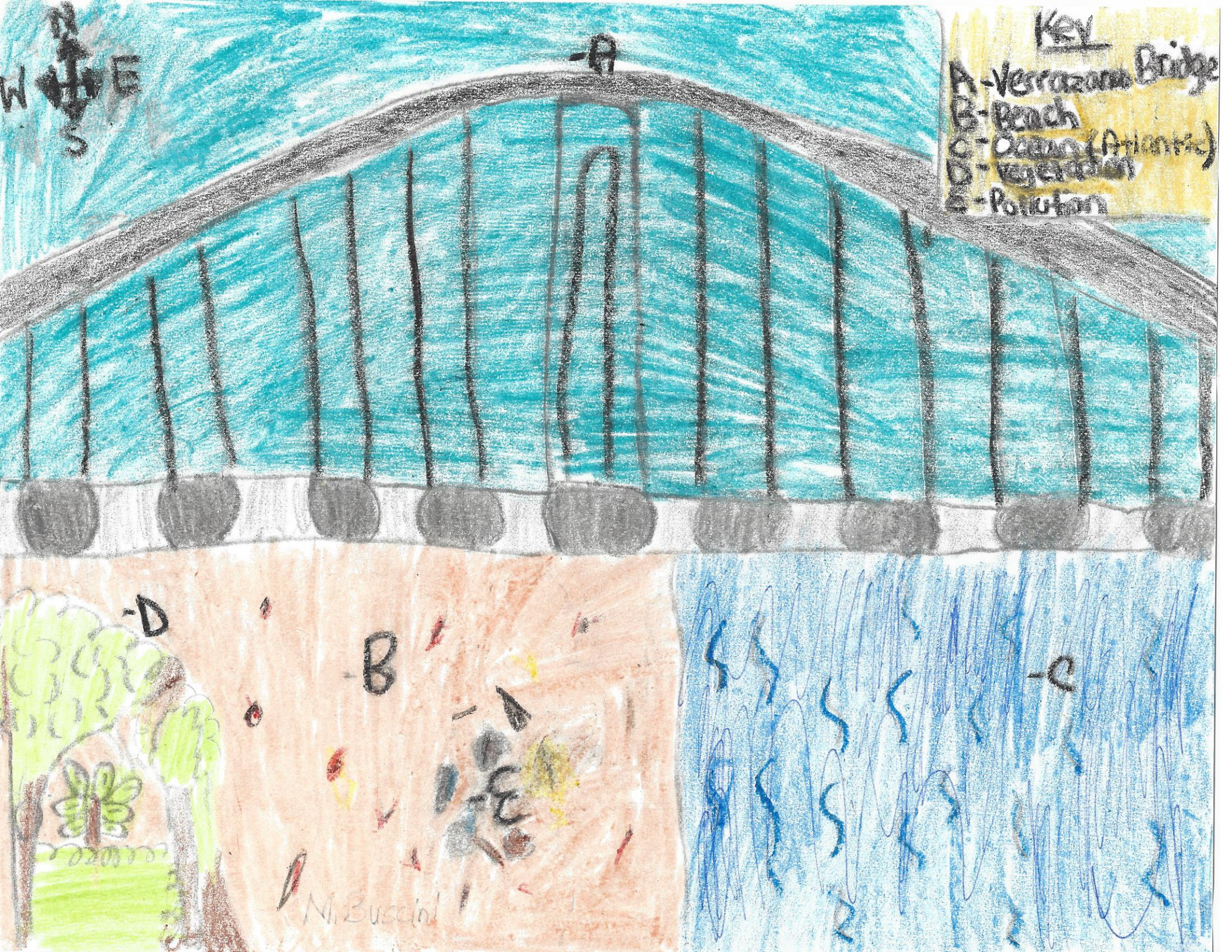
Testing the turbidity of the water

Fort Wadsworth Beach

Vegetation



J. Leare



N
S
W
E

Key
A - Verrazzano Bridge
B - Beach
C - Ocean (Atlantic)
D - Vegetation
E - Population

A

D

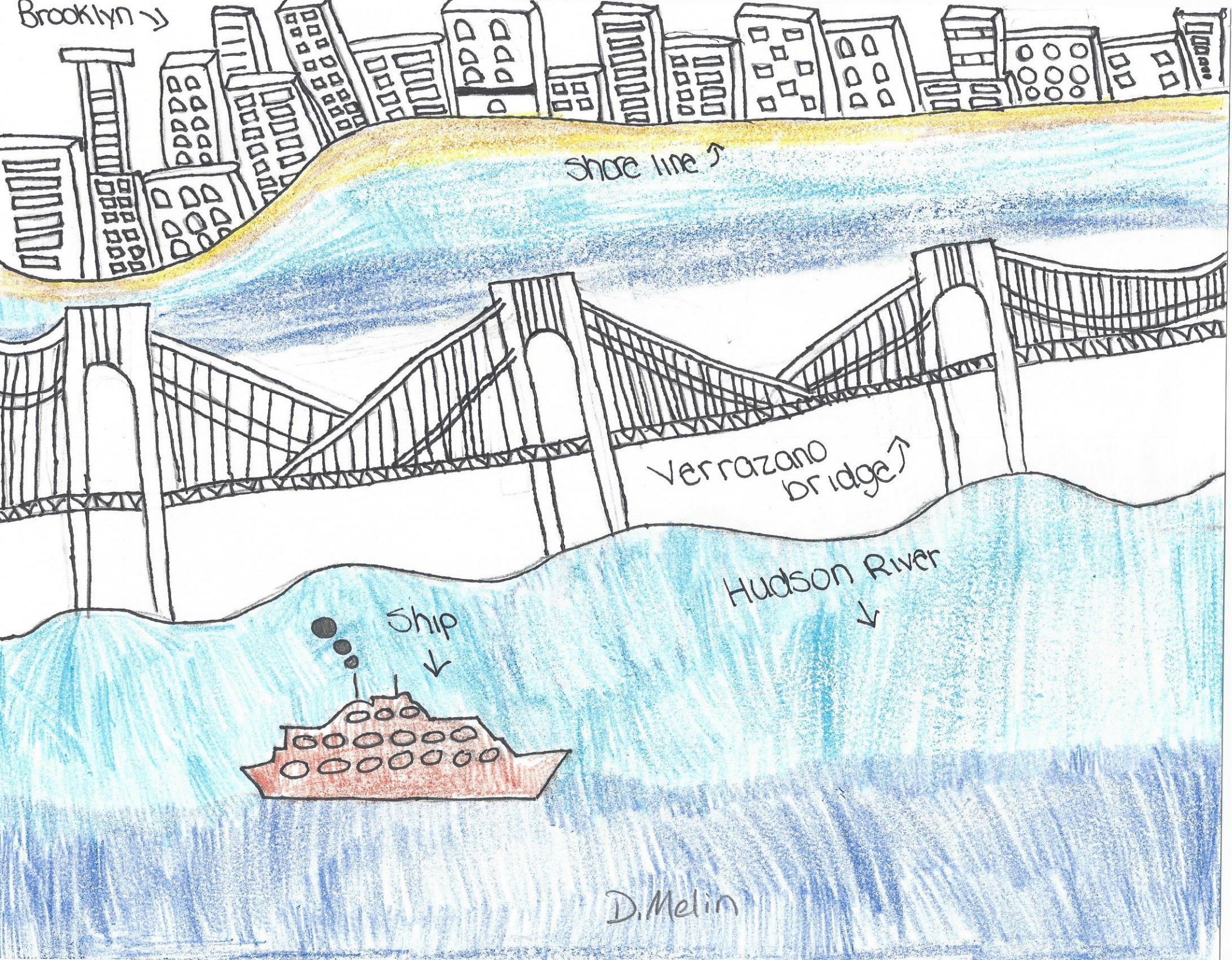
B

A

E

C

Ni Buscini



Brooklyn ↘

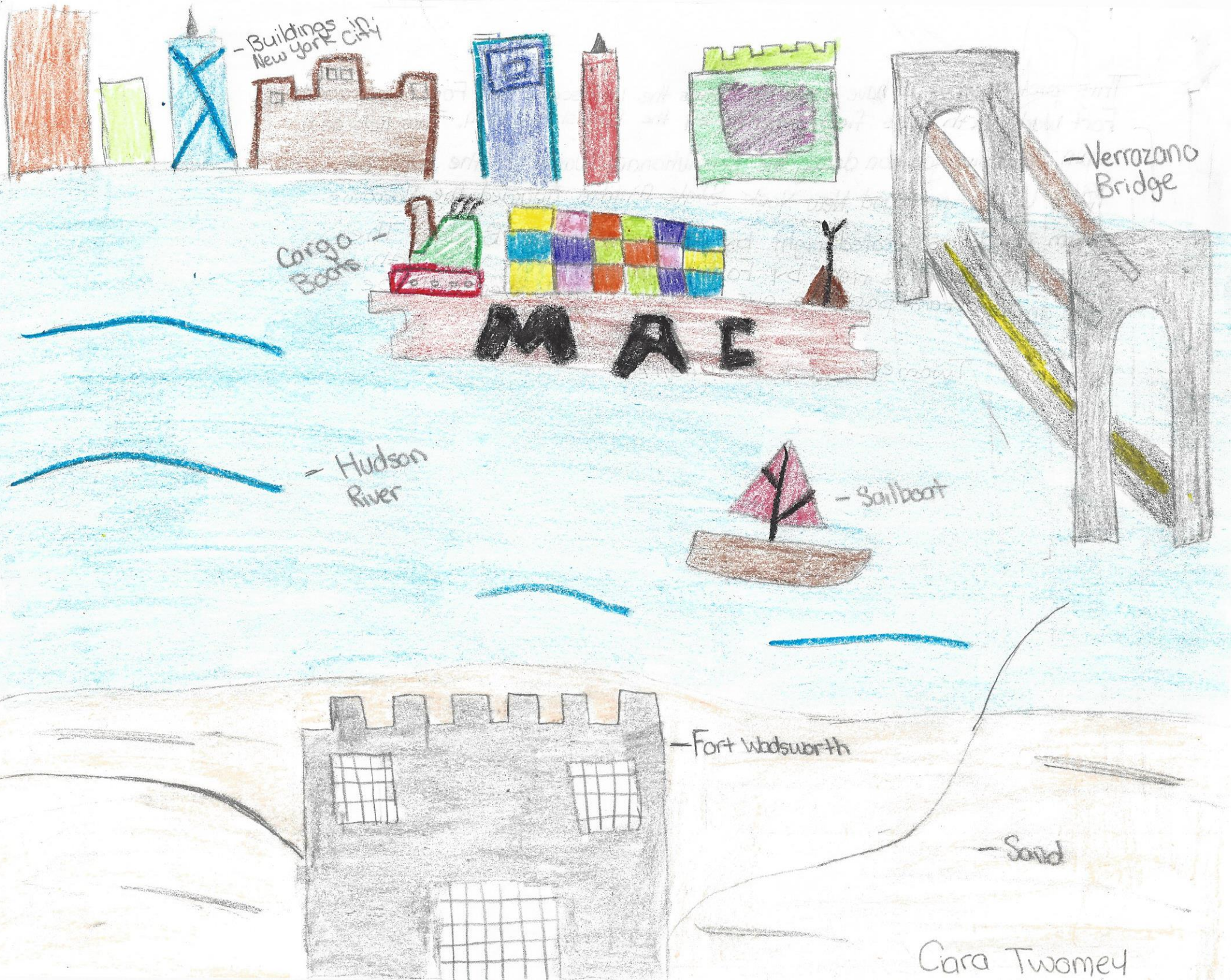
Shore line ↗

Verrazano
bridge ↗

Hudson River
↓

Ship
↓

D. Melin



- Buildings
New York City

Cargo
Boat

- Verrazano
Bridge

- Hudson
River

- Sailboat

- Fort Wadsworth

- Sand

Cara Twomey

Giuliana Marchese 7-1



TOYS R US



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*key on the back

Key

1) Verrazano - Narrows Bridge

2) Coney Island

3) vegetation (trees, bushes, ect.)

4) Atlantic Ocean

5) stations

6) rocky sand

7) orange

8) loud: compass