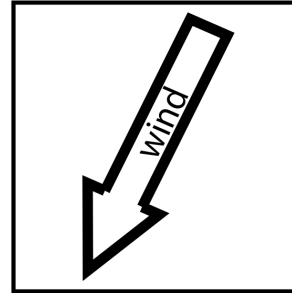
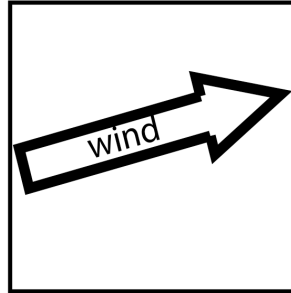
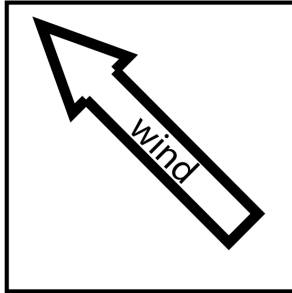


Garbage patch and ocean currents activity

In the Northern Hemisphere water is transported at 90 degrees clockwise to the direction of the wind because of the Coriolis force. If the wind is blowing in the direction of the arrows below, draw an arrow in the direction of the water flow.



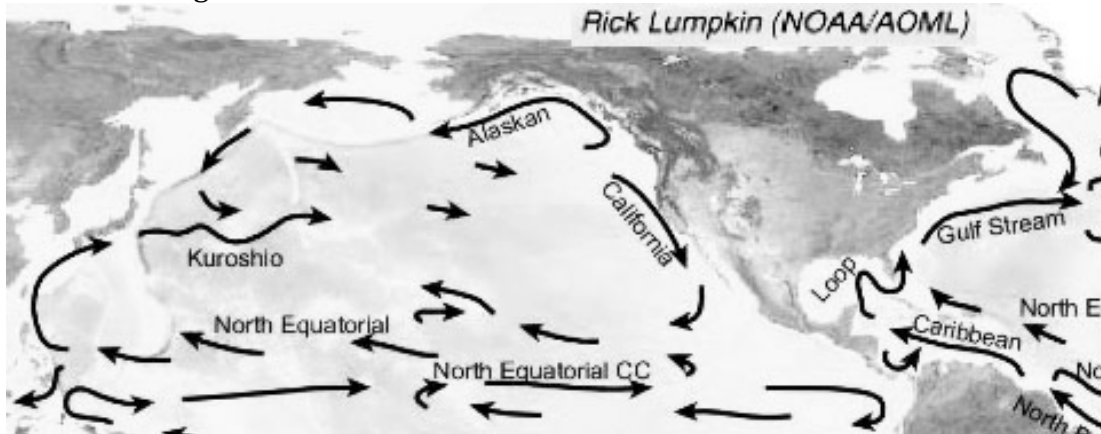
Below is a picture of the North Pacific Gyre, with white arrows indicating the average wind direction. Based on the arrows below, predict the direction of the surface currents across the Pacific and indicate the direction with your own arrows:



Describe the surface currents around the Pacific Gyre, what do you see:

Do you remember the location of the Pacific garbage patch? Mark the location on the map above and label it "garbage". Is there a connection between the surface currents and the location of the patch? If so, explain:

Below is a diagram of the currents in the North Pacific



How do the currents you drew on the previous page compare to the actual currents above? Are they similar? Describe the differences

Name the two major currents that border the United States (not including Alaska), and describe the direction each one flows:

Using the map above can you guess the relative temperature of the California and Gulf Stream currents? Which one is warmer? colder? Hint: think about where the water comes from.

If you dropped a piece of plastic on the street near your home, what path would it take to get to the center of the North Pacific Gyre? Name at least three natural processes that would take it there.

Name three ways you can help keep plastic out of the Pacific garbage patch. Need help? Brainstorm with your classmates.