**Place-based Journal Prompts for Field Notebooks Introduction**

Choose different Place-Based Journal Prompt activities to supplement your data sheets and field notebooks. Become familiar with your watershed through these prompts by turning on that creative and well-rounded scientific brain. Use all your senses and integrate art, writing, critical thinking, acting, and maybe even music to fully understand all the ins and outs of your local stream, river or pond within your greater watershed. The first half of the list will be activities you can do in the classroom. The second part will be field-based activities.

**Classroom Prompts:**

1. Sketch your watershed!

Classroom based
30 minutes

Materials:
Computer
Markers

Use the EPA delineate tool on the Hydrodesktop or EPA's surf your watershed (http://cfpub.epa.gov/surf/locate/index.cfm). Find your local watershed using a stream or county search. Sketch out your watershed (You can also print it out and paste it into your journal). Look at the watershed map and see how many places you are familiar with that you can identify on the map. Try to locate your school, home, your favorite place to hang out, local stream, major river, mountains, landmarks, etc. Label or sketch in as many of these places on the map that you can.

Now open Google Maps. Type in a town name that in located within your watershed. Zoom out until you have the whole watershed in view. Make sure satellite view on Google Maps is turned on. Label the major streams and rivers in the area on your map. Right click on the placemark of your town, and "Search Nearby" for waste water utility companies or fish hatcheries (See screen capture photo). If there are any, locate them on your map. Zoom in on your local stream and river that you will be testing. Following the river or stream, see if you can identify the different ways that land is being used along the banks of the river. Is it running through forested land, sagebrush prairie? Through town or through farm or ranch fields? Represent the different land use areas on your map. You can do this by making a key with different colors or symbols for different land uses or you can come up with your own representation! Do you notice lots of riparian vegetation along the banks (riparian vegetation are trees, shrubs, reeds, plant life that lives along river and stream banks)? Add any presence of riparian vegetation to your map along your stream or river that you will be testing.

Once your map is done, think about the different variables that you will testing. Are there sources of nutrients such as phosphates or nitrates that may enter the stream or river? What factors on your map might affect water temperature? What about DO? List at least 5 places, land uses, or riparian vegetation abundances that may affect the water quality and explain how they may affect a certain variable that you will collect in your stream.

**Field Prompts:**
**1) Past, Present, Future**

Find a spot with a good view of the creek and spread out from your classmates. Open your field notebook to a blank page. You can do the follow activity as a cartoon, story, myth, description, poem, song - anyway you want to visualize it.

Look out at the creek. Describe the creek and the surrounding area as it is now. You can also write a descriptive paragraph of how it looks, smells, sounds, and feels, sketch it out, etc. Now think of how the creek and the surrounding riparian area looked 200 years ago and describe it. Once you've finished thinking back time, think forward 100 years. How do you think it will change? Use some of the information that you have learned about predictions for the changing climate in your area and try to incorporate that into your journal response.

**2) How did this creek or river get here?**

Why is this creek or river flowing in front of you? How did it get here?
Respond to this question in any format that you would like. You can write a myth, create a script for a short skit, write a scientific explanation, draw a diagram, or even build a sculpture using the materials around you.

**3) Macro Comic strip**
Identify and sketch the coolest macroinvertebrate that you found during your macroinvertebrates count. What types of super power adaptations does your macro have to make it's life easier in its habitat? Use your imagination to create a story about this macro. Create a comic strip, with multiple characters, telling the story about this macro and it's life in the stream.

**4) The Water Cycle Happens All Around Us!**
Open up your field notebook to a blank page. Draw a rough sketch of the landscape around us. Draw a line where the sky meets the earth, where one ridge meets another, where the foreground meets the middle ground. After you have recorded the edges of the major landscape forms, start to fill in the details like streams, rivers, lakes, trees, bushes, and clouds. Now think about the water cycle. Where are processes from the water cycle occurring within your landscape? Label where think these processes are taking place and describe what is happening. For example, if it is a sunny day and there

are lots of plants, plants are photosynthesizing and transpiring, so their leaves release water vapor into the atmosphere.

Evaporation
Precipitation
Runoff
Transpiration
Infiltration
Condensation
Groundwater Recharge

**5) Close Observation**

Make three 2 inch by 2 inch squares on your paper. In these squares, draw three contrasting shapes of small objects on the ground; a leaf, a rock, some grass, whatever you find. Try to draw the contours of one of these without looking down at your paper (a blind contour). Let your hand and eyes connect without looking at your page. Once you have finished your three drawings, think about what role these objects play in the watershed. How might they affect the water in the nearby stream, river or lake. For example, tall grasses or woody stemmed plants near a stream might help filter out eroded sediment from getting into the stream.

**6) Act out a watershed**

Split the group into small groups and have each group explore a different part the surrounding area. Your group will create a skit about what you observe, and what types of activities you think occur there. For example, if you see a merganser duck go for a swim in the river, the skit could be about the day in the life the duck. Each skit should include major components of the watershed ecosystem such as water, sun, producers, decomposers, consumers, water characteristics, etc. You will perform your skits in front of the rest of the group.