Jones Lane Elementary School Creek Freaks Club Tuesday 3:30-4:30pm in April and May 2014

Creek Freaks Schedule



Indicates that the activity CAN be done on a rainy day or inside, but can usually also be done outdoors



Indicates that the activity relies on students being outdoors

Week One – Introduction to Creek Freaks



Are you already a Creek Freak or do you want to become one? What are your favorite things to do in creeks? (Discussion)



Watershed address- Like a street address "I live in the Muddy Branch, Potomac River, Chesapeake Bay, Atlantic Ocean watershed" Can use maps for this, everyone write theirs down.



On the Edge photos and discussion (Green Zone page 6) Explore riparian zone and write 3 differences between riparian zone and upland (On the Edge Addendum notes)



Unstructured time: "Exploration" Encourage kids to explore and become familiar with the area and flip over rocks to find critters.



Watershed model – pollution prevention (Addendum)- can be done on Week 1 or Week 2-depending on how much time you have, good for a rainy day.

Week Two - Creek Soils and Erosion



Soil texture (Green Zone page 32-33)- give each child a cup and shovel and hand out notecards with instructions: Go get a cup of soil from the edge of the stream...from under a log...from near a tree...



Soil percolation (Green Zone page 32-33)- can collect local soil and come back inside to do this—this can also be saved for a rainy day.



Unstructured time: "Exploration" Direct them to explore, encourage them to go find other types of soil, look for erosion, or something soil related

Week Three – Creek Channels



Putting on the brakes/create a stream channel that slows the water (Green Zone page 21 and Addendum notes) Discuss what makes water slow down or speed up in a stream Participants create their own creek channels in plastic boxes or shoeboxes using materials from outdoors (or indoors) Run a contest to see who can slow down their marble (representing water) the most, without it stopping completely



Unstructured time: "Exploration" If the stream is small, or there are shallow edges, have the kids experiment with making some of the water speed up or slow down. What makes the water speed up? What makes it slow down? [Kids invented this on their own, basically dam building—I was able to make it apply to a lesson about speed of water flow]

Week Four –Water Quality



Is the water clean? (Addendum) Critter cubes (Addendum)



Preserved specimens identification quiz – use a subset of the bugs, pictures or preserved specimens. Good intro to Biological Monitoring-can be done in conjunction if you don't have 8 weeks.



Make your own macroinvertebrate- Craft activity- use toilet paper rolls, googley eyes, pipe cleaners, straws, Q-tips, cotton balls, feathers, colored paper or other craft supplies to create your own macroinvertebrate. Encourage students to give their macro the tools it needs to eat, breathe, find (or make) shelter, and hide or escape from predators.

Week Five - Biological Monitoring



Biological monitoring in the field

Week Six - Chemical and Physical Monitoring



Chemical and physical monitoring in the field- You can split these into two different weeks

Week Seven – Water Quality and Plants



Filter plants – (Green Zone page 37) Erosion in the zone (Green Zone page 40)



Begin video planning (everyone gets one or two topics from the seven week session to explain on video and everyone can show their favorite part of the stream)

Week Eight – Video and Data Analysis/Data Entry to Creek Freaks website



Complete video planning (everyone gets one or two topics from the seven week session to explain on video and everyone can show their favorite part of the stream)



Film interviews/skits/etc. in the field



Upload Data to Creek Freaks website from Biological, Chemical and Physical Monitoring. Can be done on the day you collect it if there is time.