

A Redfish Tale supplementary material

Watershed address: worksheet & projector images; Time: 15 – 30 min.

This activity introduces the student to their local watershed. Several images are included for projection to show local, county and state watersheds. Students use a printed map to name the creek(s) near their home and follow the path to Dog River and Mobile Bay. Files: WhatIsAWatershed.doc, WatershedAddress.doc, CreeksToDogRiver.gif. Extra images showing watersheds: AlabamaWatersheds, MobileCountyWatersheds and DogRiverWatershed)

Can You Find These Words: worksheet; Time: 15 – 20 min

Word search of 16 watershed vocabulary terms. File: CanYouFindTheseWords.doc

Watershed Crossword: worksheet; Time: 10 min

Crossword puzzle File: crossword.jpeg

Make a Watershed Model: lab activity for small groups or teacher led for the whole class

Time: one 40 – 50 min. class period

Materials: aluminum foil, shallow pan, food coloring or colored powdered drink mix, potting soil, spray bottle, plastic bathroom cups

This activity allows students to create a model of a watershed by shaping mountains, valleys, rivers and a bay in the foil. The small cups can be used for support to build up the mountains. Students will then put soil on their model, add some pollution(food coloring, drink mix) and make rain (spray bottle) to start the run off process. File: MakeAWatershedModel.doc

Fred the Fish: lab activity for 2 – 3 groups or teacher led for the whole class;

Time: one 40 – 50 min. class period

Materials: clear plastic tub filled 1/3 water; straight, strong wire with a “fish” on the end (can use white material); Ziplocs filled with specified dry items; cups with cooking oil and soapy water ; red and green food coloring

This activity illustrates the impact humans have on the local watershed system. Using common items such as potting soil, paprika, oregano flakes, cooking oil and more, students will create the runoff pollution of soil erosion, fertilizer, leaves in storm drains, automobile oil, etc. A script leads Fred the Fish on a trip down his river past

different situations created by man. As each situation describes a pollutant put into the river, students will add their item. The students will see the water become more affected as each new pollutant is added.

A link to **The Citizen's Guide to Reducing Polluted Runoff in Coastal Alabama** is given for possible discussion or research topics. File: FredtheFish.doc

Who Polluted the River: lab activity for 2 – 3 groups or teacher led for the class;

Time: one 40 – 50 min. class period

Materials: clear container of water per 15 students; 1 set of Ziplocs filled with specified dry items and cups with specified liquids per 15 students

This activity illustrates how a water body becomes polluted as populations increase. Common household items represent the pollution created by action in a story that is read. Students will add the items and see the water become more polluted as the story progresses. Discussion questions are provided to consider ways to conserve resources and reduce pollution. File: WhoPollutedtheRiver.doc

Water Audit: classroom activity using worksheet with at home research; small group or class preparation and wrap up discussions

Time: preparation discussion (small groups or entire class): 20 – 30 min;
wrap up: class discussion or small groups, oral or written responses:
30 – 40 min.

Materials: data sheet worksheets, Wrap Up question sheet

After a preparation discussion, students will conduct a home water audit. Class or small group oral and written responses will compare and contrast the results with and without water conservation actions. Files: WaterAudit.doc, ConserveWaterSurvey.doc, WaterAuditDataSheet1.doc, WaterAuditDataSheet2.doc

Groundwater parking lot: class activity with worksheet (mathematics tie in)

Time: one 40 – 50 min. class period

Materials: worksheet, calculator, paper

Students will use conversion values to calculate how much water is lost to runoff that could have been absorbed to replenish groundwater levels. Several follow up questions are included. File: GroundwaterParkingLot.doc