Drainage Divide Laboratory Overview

This is a laboratory activity designed to teach middle and high school students about Drainage Divide migration, a geological process that happens over long time scales and alters the geography of the landscape. The area from which all rainfall flows to a stream is called a drainage basin or catchment area. The boundary between neighboring drainage basins is typically located along a ridge and is called a drainage divide. This is because it divides the landscape into different drainage basins. Although drainage divides may appear immobile, they can actually move through time in a process called divide migration. Over long time scales, the migration of divides can meaningfully change the area of drainage basins, and therefor the discharge of the rivers that drain them, as well as the quantities of sediments and nutrients that are carried by these rivers. This lab allows students to explore the mechanism of divide migration.

The lab was designed to be done with simple materials that students would have available in the home. So teachers can assign students to do this class project outside of the classroom. Alternatively, students can work in teams in the classroom to undertake this lab project.

<u>Materials to Download</u>

- Drainage Divide Complete Lab Manual
- Drainage Divide Migration Lab – Complete Video