Third Grade Stream Tables Lesson Plan

1. Hook: Show video landslides: <http://video.nationalgeographic.com/video/101-videos/landslides>
2. Ask students their observations or questions about the video
3. Tell students that they will be engineers/observers that will build a landscape and observe what happens when a large amount of rainfall happens suddenly- explain that this may happen during a ¨flash flood”or storm
4. Pass out the Stream table recording form
5. Show students the materials they will be using: Painters bin with hole in the bottom, sand, baking soda, food coloring, linker cubes, water bottle, buckets to catch water/drainage, plastic bag for waste removal
6. Explain to students that they will be working with their table groups and each will have a specific job- assign jobs: land director (sand/baking soda), pollution director (food coloring placement), water director (water bottle/rain placement) , house director (linker cube placement)
7. Have students talk to each other about their plan for building a landscape-- don´t draw yet- their goal is to plan a landscape with the least amount of damage to the houses
8. After groups agree on the plan- they are going to sketch and label their plan together on their recording sheet
9. Have land directors gather the type of soil their group will use and bring it back to their station
10. Groups can begin building their landscape! (Don´t pour water yet!!)
11. After groups have had enough time to build-- students stop building and go around to see what other groups have built
12. All at once- teacher directs students to get ready to observe their specific job (pollution observes food coloring.. etc)
13. Teacher says GO and water directors release the water bottle where the group decided to drop the water
14. All team members watch/observe their specific variable
15. When water is all gone- teams sketch the ¨after” of what their landscape looks like
16. Teams share out what they observed ¨before¨ and ¨after” of their landscape-each person can share their job and what happened to the water, soil, houses, and pollution
17. Group discussion about what they would do with a 2nd iteration- Pose questions: ¨Is it better that pollution stayed in the ground, or moved down the hill?¨ ¨If you are a contractor, what is important to keep people safe?” ¨Which soil would you choose to live on?” ¨How can you prepare for a flood?¨ ¨What would you do differently next time?” etc…
18. Close by having students do the Quick write on the back of the recording form
19. Extensions: 2nd iteration