

Culminating Activity: Where Should I Build My House?

Teacher: Ben Miller

Subject: Science, Social Studies and ELA

Unit Title: Land And Water

Objective:

Students will be apply their knowledge gathered throughout the unit to make an educated decision on where to build there house.

Suggested Order, Tips, and Details

Step 1: Setup class erosion table and establish a stream so students can see where water has flowed in the past (you could skip this step to make it more “adventurous” for the students).

Step 2: Make a 3 x 5 (or whatever you deem appropriate for your stream table) grid using string (or drawing lines in dirt) on your stream table and make a map of your table to number the grid (see paper example below). My class established the stream path by having water flow down it (around 2 liters) and then we drew some very light lines in the dirt after that we put numbered flags in each section so the kids could identify their section they’d like to live in.

Step 3: Identify the soil type for your stream table. Lead a discussion about your table in regards to positive and negative for your soil type.

Option: Create a more intricate stream table by putting better soil types identified during soil lesson along the river or in the more “risky” areas.

Step 4: Have students work on creating opinion paragraphs on what area or grid number to build their home on. Have them use data gathered from the soil lesson and various other lessons throughout the unit.

Step 5: Place various homes (possibly use some game board pieces from Monopoly or something similar) at the locations students choose.

Step 6: Begin a steady flow of water, add rain, spring melt off, flooding and any other ideas that come to mind to help complicate the homestead equation (use two liter bottle with multiple holes in it to create rain).

Step 7: Have students reflect on their homestead decision making. This can be done through discussion or formally through a self made questionnaire.

Optional Ideas:

- Put a “hidden” rock under the soil to divert the water.
- Add some “hills” to the stream table
- Plant some grasses and other ideas to prevent erosion.
- Add some “amenities” (lake, mercantile store, etc...) to your map to make some areas more appealing than others.
- Add toothpick flags to your dirt grid in the erosion table to help students identify what number they want to build on.
- Identify different types of soil in different areas on the map or grid

Resources and Materials:

- Class size erosion table (make one out of wrapping paper tote)
- Map of erosion table and grid
- String for class size erosion table grid or just draw lines in dirt
- Tape (for string)
- Flags to identify sections of stream table grid (I used toothpicks and masking tape).

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

25	26	27	28
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Each square = 2 square miles