Rain Harvest Design Challenge Constraints

- You will be creating a model home using individual milk cartons.
- Use a tray with a ½” lip as the landscape around your home.
- Use natural materials such as mulch, sand, rocks, twigs to model natural landscape outside of your home.
- You will have 60 minutes to build your home and landscape.
- Your home and rainwater harvesting system must collect, retain or reroute water for later use.

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Name: _____

Rain Harvest Design Challenge

Your task: Create a model home that maximizes water harvesting. Possible features could include a cistern, gutter system, a recharge pit, or rooftop rainwater harvesting.

Ask: What do you already know about rainwater harvesting?

Imagine: What will your rainwater harvesting system look like? How will you test it?

Plan: Draw a sketch of what your house and rainwater harvest system would look like.

Create: After you make your rainwater harvesting system, explain its design.

Improve: What is one way you could change your design and make it better?

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The first thing we tried was:

One thing I noticed was:

We tried to change or improve our design by:

Was your design successful? How do you know?

Rain Harvest Design Scoring

For each statement, list a score for your effort.
1=Unsatisfactory 2=Needs to Improve 3=Good effort
4=Outstanding effort

Description	Score
I worked with my team. We built a model that harvested rain water.	
We used different natural materials to help slow rainwater runoff.	
I helped my team solve problems. We treated each other with respect.	
I completed the lab sheets for all tasks. I responded with thorough and detailed answers.	

Total Score (out of 16) : _____