AGRICULTURAL ENGINEERING

AGRICULTURAL ACTIVITY

Creating a Water catchment

Materials

- a variety of objects to build land-forms from; *small cups, jars, bowls, plates, stones, blocks etc*
- a tray
- sheet of light-weight plastic or garbage bag
- spray bottle filled with water
- sponge

Original source link: teachengineering.org

- food colouring
- masking tape

Instructions

1. Split the students up into groups of 2 or 3 and ask them how they think water enters lakes, rivers and where rain goes once it falls.
2. Give each group a tray and ask them to use the objects to create a model water catchment location using the objects to form hills, valleys and mountains. Use the masking tape to secure the objects to the tray.
3. Cover the objects with the plastic cover. Mold the plastic around the objects and secure the plastic with tape.
4. Ask the students to research precipitation and how it works; send them back to test their own water catchment model.
5. Using the spray bottle to simulate rain over the tallest object and watch how it flows and where the water catches on their model. You can use food dye to make it easier to see the water and how it flows down and around the model.
6. Students can use the sponge to simulate a forest on the location. What happens to the flow of water?
7. Ask the students to research the below vocabulary and write a definition for each.

Water catchment vocabulary to research

- atmosphere
- basin
- biosphere
- catchment basin
- climate
- gravity
- precipitation
- season
- topography

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