

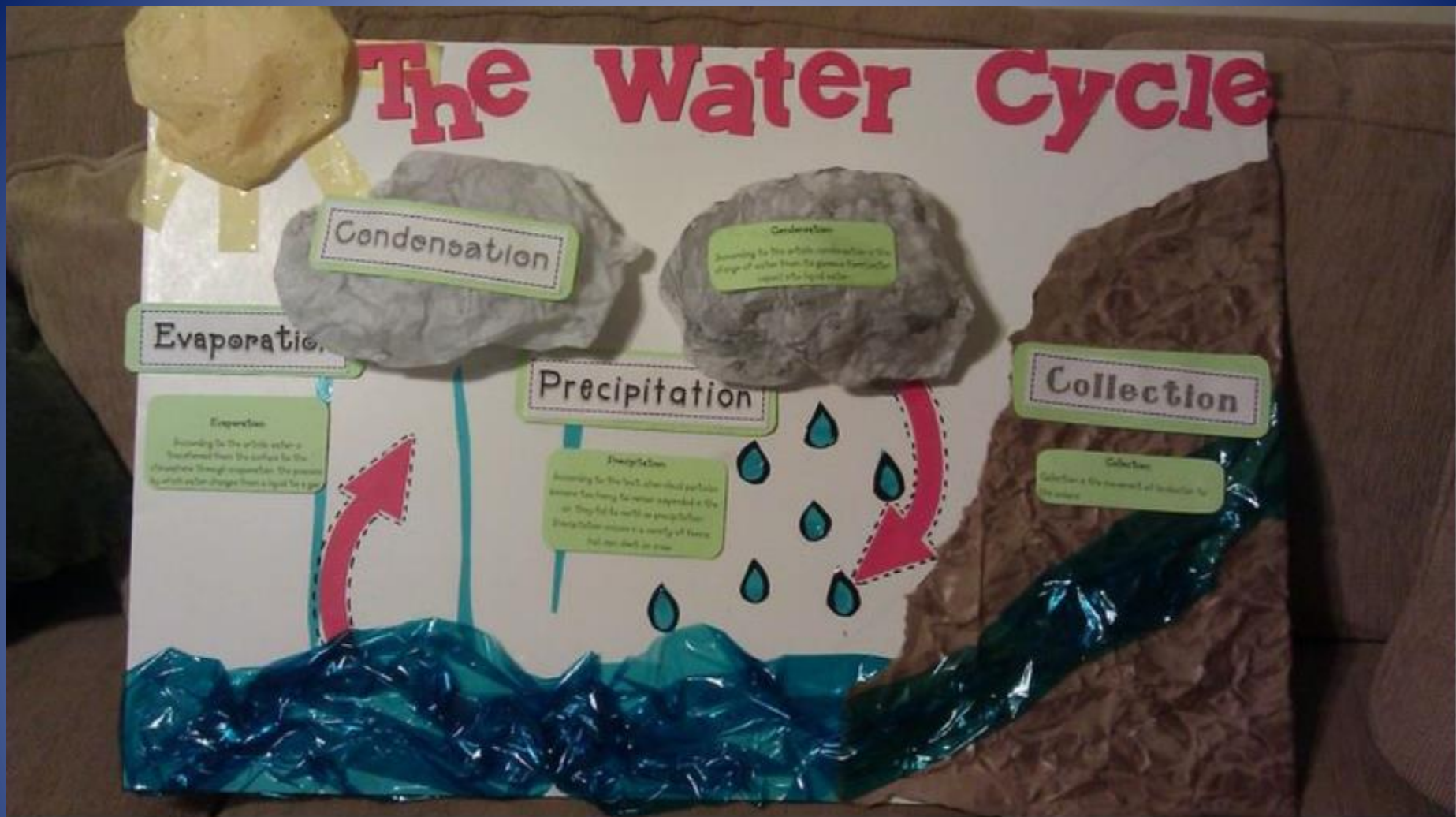


Water Cycle Project Examples

An excellent model can be made from inexpensive, easy to find materials. Be creative. Use these projects as inspiration but remember to check the rubric to ensure your project meets all of our class requirements.

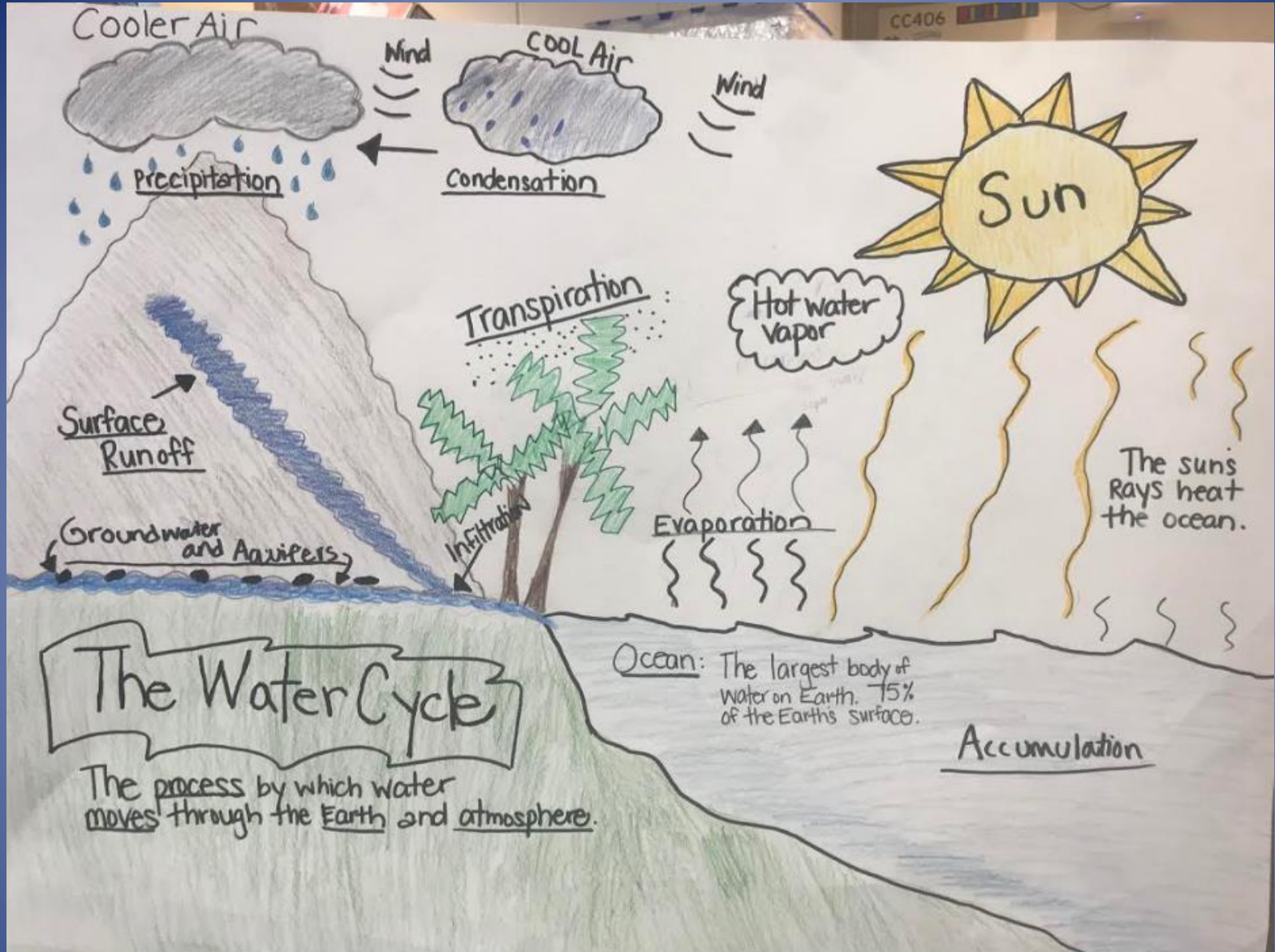


- Materials: Construction paper on poster paper.
- Easy to find, inexpensive materials.
- This project is a great visual representation BUT, it does not have enough components for an AD score and it lacks explanations of each component.



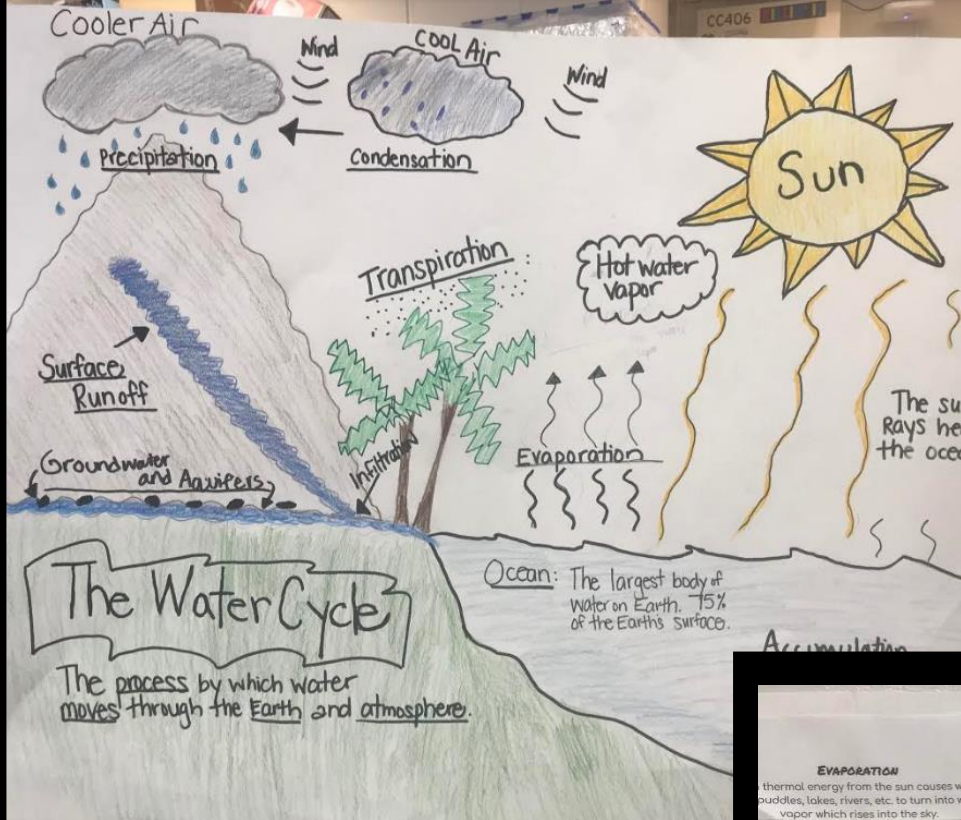
Materials: Plastic wrap, Tissue Paper, Typing paper, Glitter, Markers.

Excellent labels and explanations. Remember, YOUR project needs at least 6 components.



Materials: Markers, Colored Pencils, poster board

Feeling a little creative? Feel free to paint or draw your model. Remember your labels and you're set to go.



This student included explanations on the back of their model. This is an easy way to add important info without compromising the aesthetic of the model.

EVAPORATION
 Thermal energy from the sun causes water puddles, lakes, rivers, etc. to turn into water vapor which rises into the sky.

TRANSPIRATION
 Transpiration is a certain type of evaporation. Transpiration accounts for 10% of the water that rises into the air. In the process, plants release excess water through the pores in their leaves.

CONDENSATION
 As the evaporated water cools down, the vapor condenses into water drops. This process is what causes the formation of clouds.

PRECIPITATION
 When clouds reach a "critical mass" the water droplets in the cloud fall to the earth in the form of rain, snow, sleet, hail, etc.

SURFACE RUNOFF
 Surface runoff is the movement from landing to setting place. When water falls onto the ground, it usually does not stay in the place it lands.

ACCUMULATION
 When water runs off in a particular area it eventually ends up gathering in one place. That is how a watershed is formed. These gathering areas typically take the form of oceans.

INFILTRATION
 Depending on the quality of the ground, sometimes the water soaks into the ground or infiltrates the surface. If the ground is less porous, the water will just runoff.

GROUNDWATER AND AQUIFERS
 Groundwater is exactly what it sounds like; water that remains underground. The longer and deeper the water infiltrates into the ground, the cleaner the water becomes. Aquifers are just bodies of rock, sand, clay, etc. that allow the water to be stored underground.

GROUNDWATER DISCHARGE
 When groundwater exists through natural springs/out of an aquifer. We might also take out the water by digging or drilling through the ground to access it when needed.

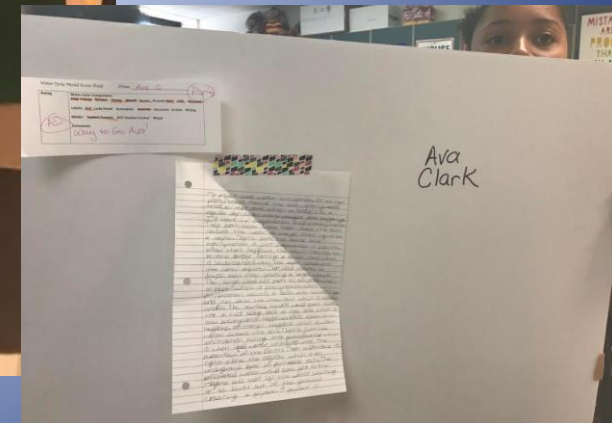
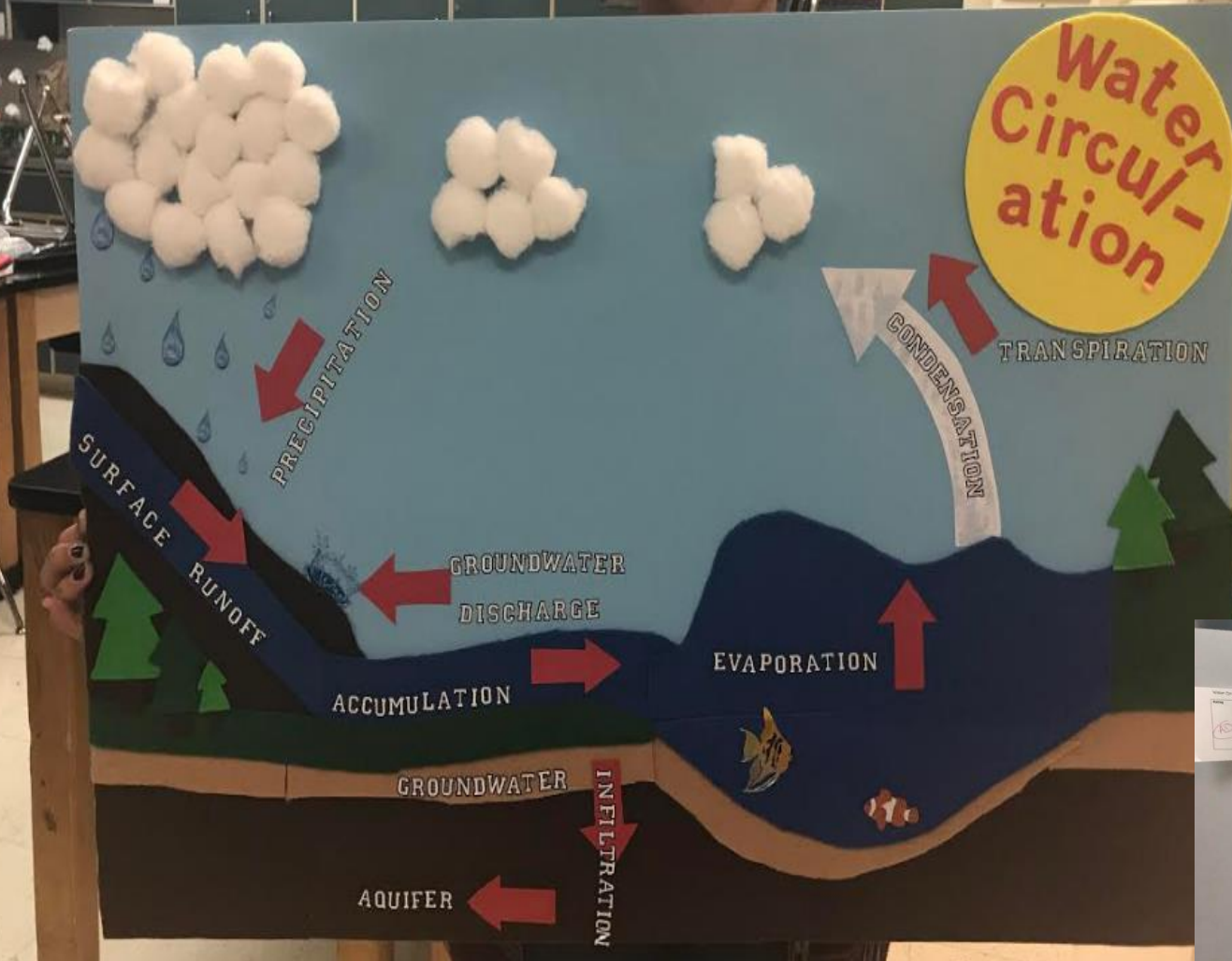
Imani Clayton
 Honors Science

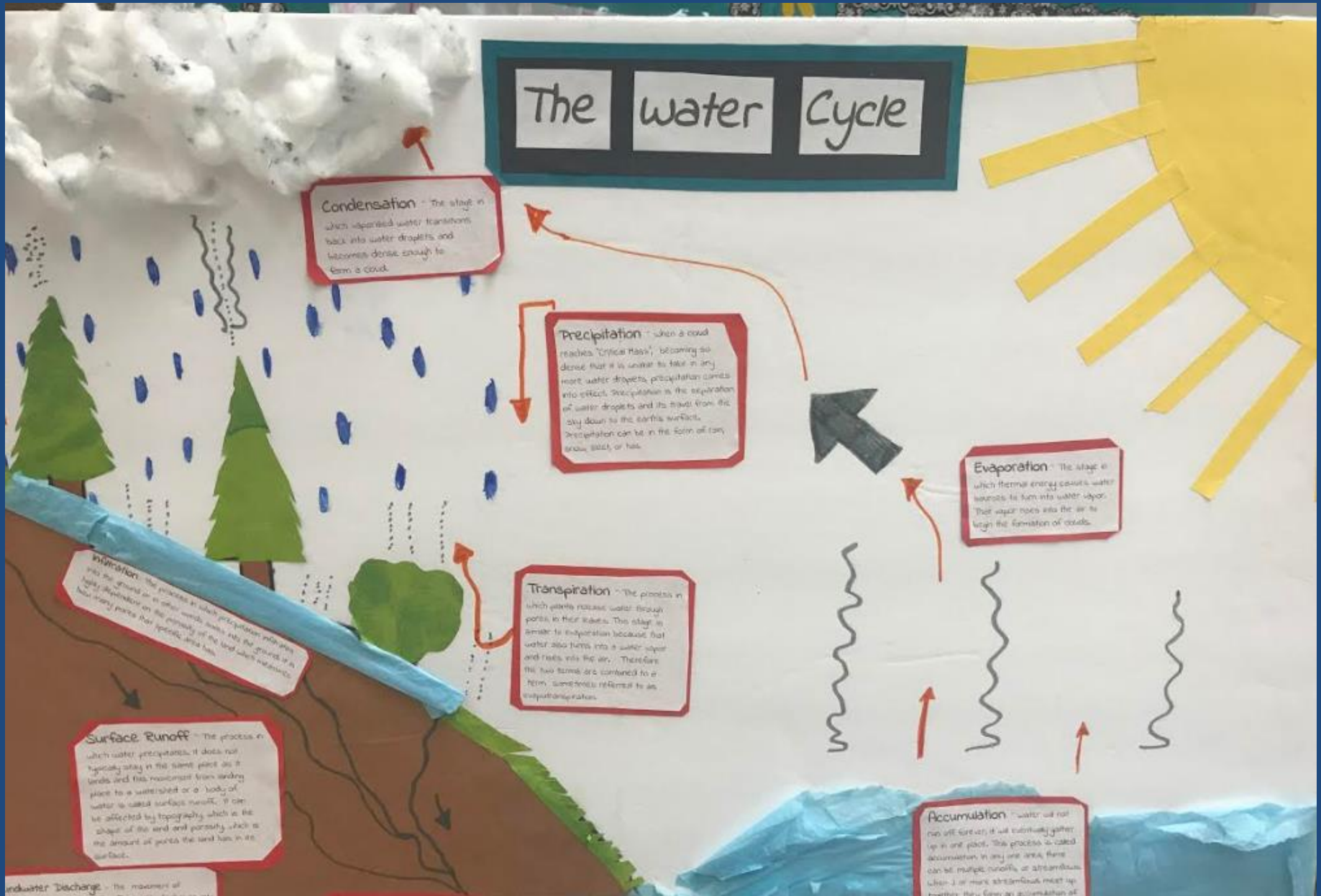
Guide Board

Materials: Cotton Balls, felt, foam-board, markers, stickers.

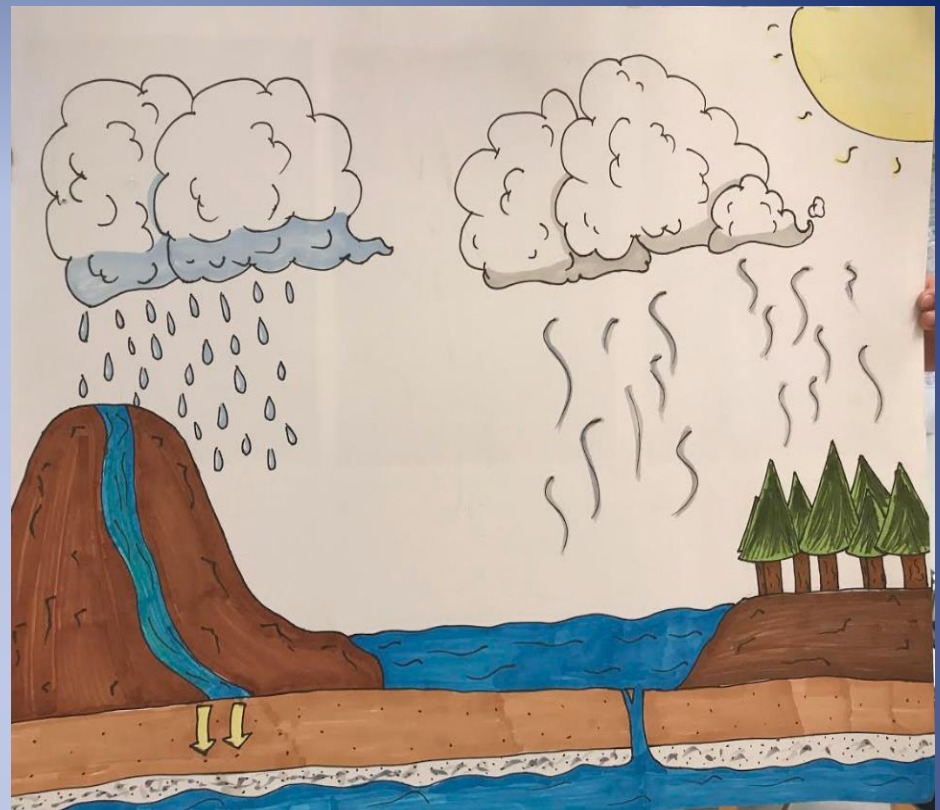
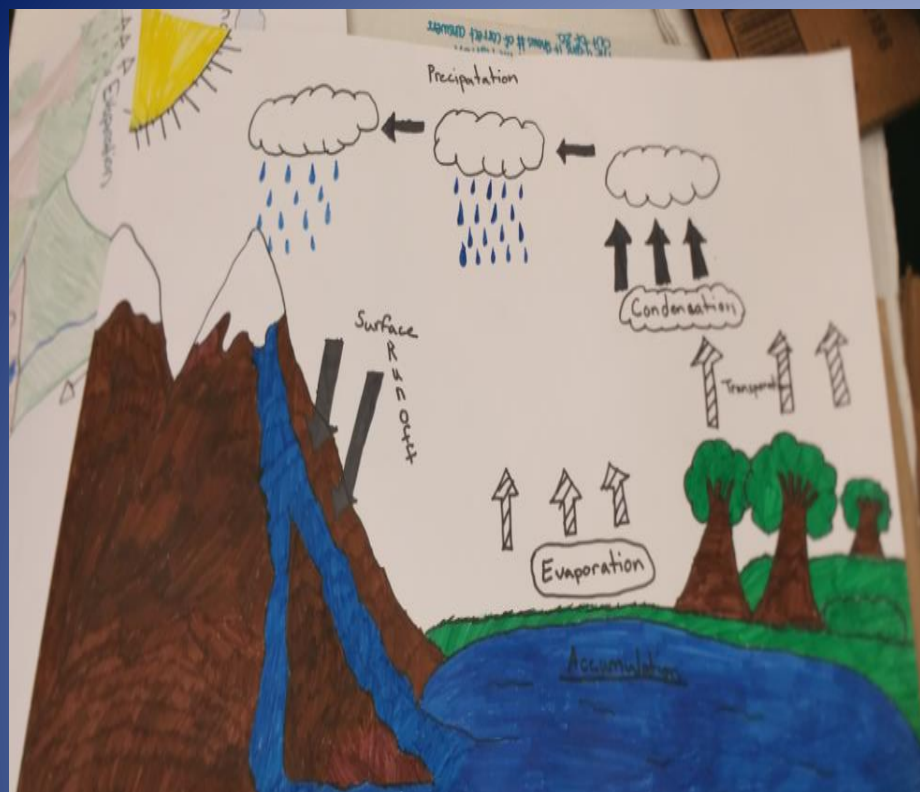
Creative use of materials.

Explanations attached to the back of the board.





Another great example of using simple, easy to find materials to make an effective model.



Materials: Poster Board and Markers

Simple supplies can make a great visual! Remember, your project needs to include explanations/descriptions of each stage. They can be added directly to the model or on a separate sheet of paper.

The Water Cycle

Evaporation - The phase in which liquid water turns into a gas or water vapor because of the heat from the sun. Evaporation can start at 32 degrees Fahrenheit, but the process will then move extremely slowly. The amount of evaporation depends on the amount of water and the temperature. Evaporation is important to the water cycle because it turns liquid water into vapor, which leads to condensation.

Transpiration - The process where water is absorbed from the roots and released as water vapor from the pores of the leaves. 10% of humidity in the air is from transpiration. This is important because it gets rid of unneeded water in plants.

Condensation - The process in which water vapor turns into liquid water. Water vapor adheres to other vapor molecules and forms clouds. Condensation is important to the water cycle because it is responsible for the formation of clouds.

Precipitation - The phase of the water cycle when water falls from the sky in the form of rain, freezing rain, snow, sleet, or hail. When clouds have a critical mass, water droplets will fall to the ground. Precipitation is important because it is one of the main components of the water cycle and without it, the water cycle would just stop.

Surface Runoff - When water from melted snow, rain, etc. flow over the surface of land, if there is a path for the water to flow downhill, it will obviously go in that direction. Surface Runoff is important because without it, there would be flooding everywhere.

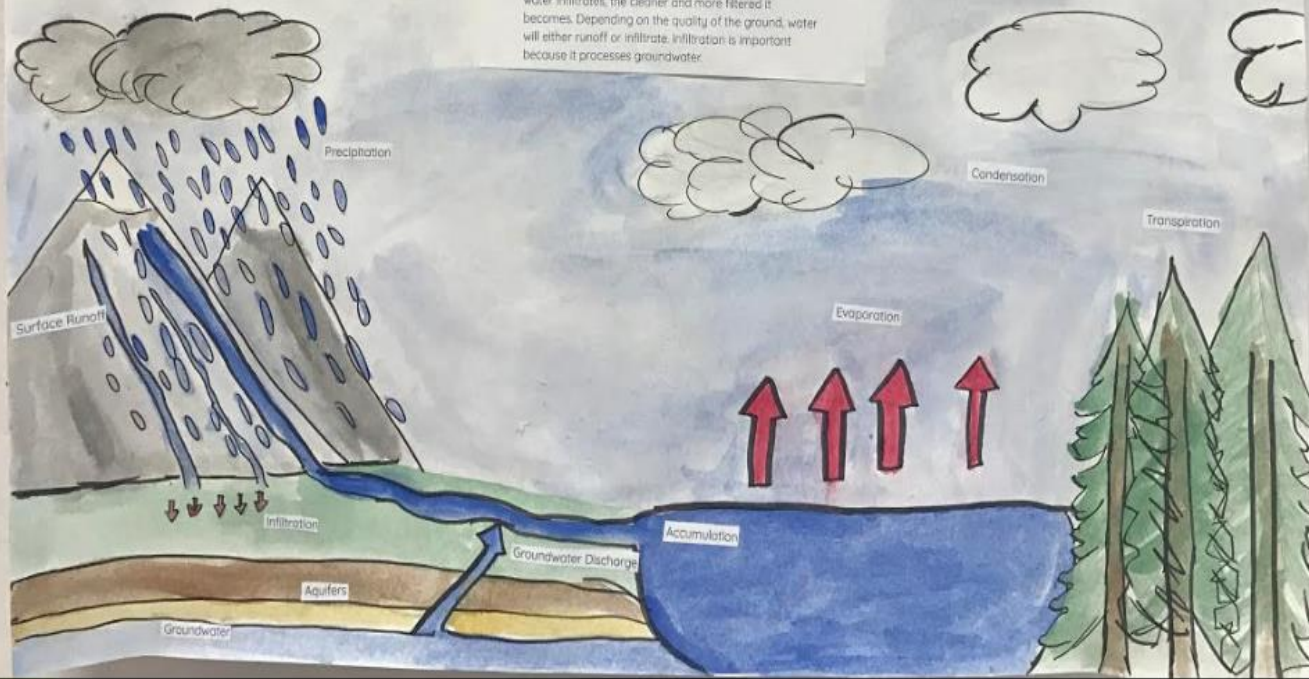
Accumulation - The phase in which water gathers into larger piles. The water can gather into many places such as lakes, rivers, oceans and other watersheds. Accumulation is important because it gives runoff a place to go.

Infiltration - The process when water on the surface of land soaks to the subsurface. The longer and deeper the water infiltrates, the cleaner and more filtered it becomes. Depending on the quality of the ground, water will either runoff or infiltrate. Infiltration is important because it processes groundwater.

Groundwater - Water that infiltrated through the surface of the ground and is stored beneath the subsurface. The deeper the water goes and the longer it has been underground, the cleaner it gets. Groundwater is important because it gives humans and animals a steady supply of filtered drinking water.

Aquifers - An underground level of water-bearing rock, a.k.a. rocks that let water pass through. Aquifers consist of sand, clay, etc. Aquifers are important because they help filter groundwater.

Groundwater Discharge - The phase of the water cycle in which groundwater exits the ground from a man-made well or a spring. Groundwater Discharge is important because it gives groundwater a place to exit the ground.



Looking for a way to include all of your info and your model on the same poster?

Consider a layout similar to this one.

Materials: Typing paper, Markers, Watercolors, tape/glue.

The Water Cycle

By: Simone Prosper Science 7th hour

Precipitation
• When clouds get too heavy or reach a critical mass, water droplets fall onto the Earth in the form of rain, snow, sleet, hail, etc.
Transpiration
• Excess water plants release through the pores in their leaves. It equals for about 20% of all water vapor in the air.

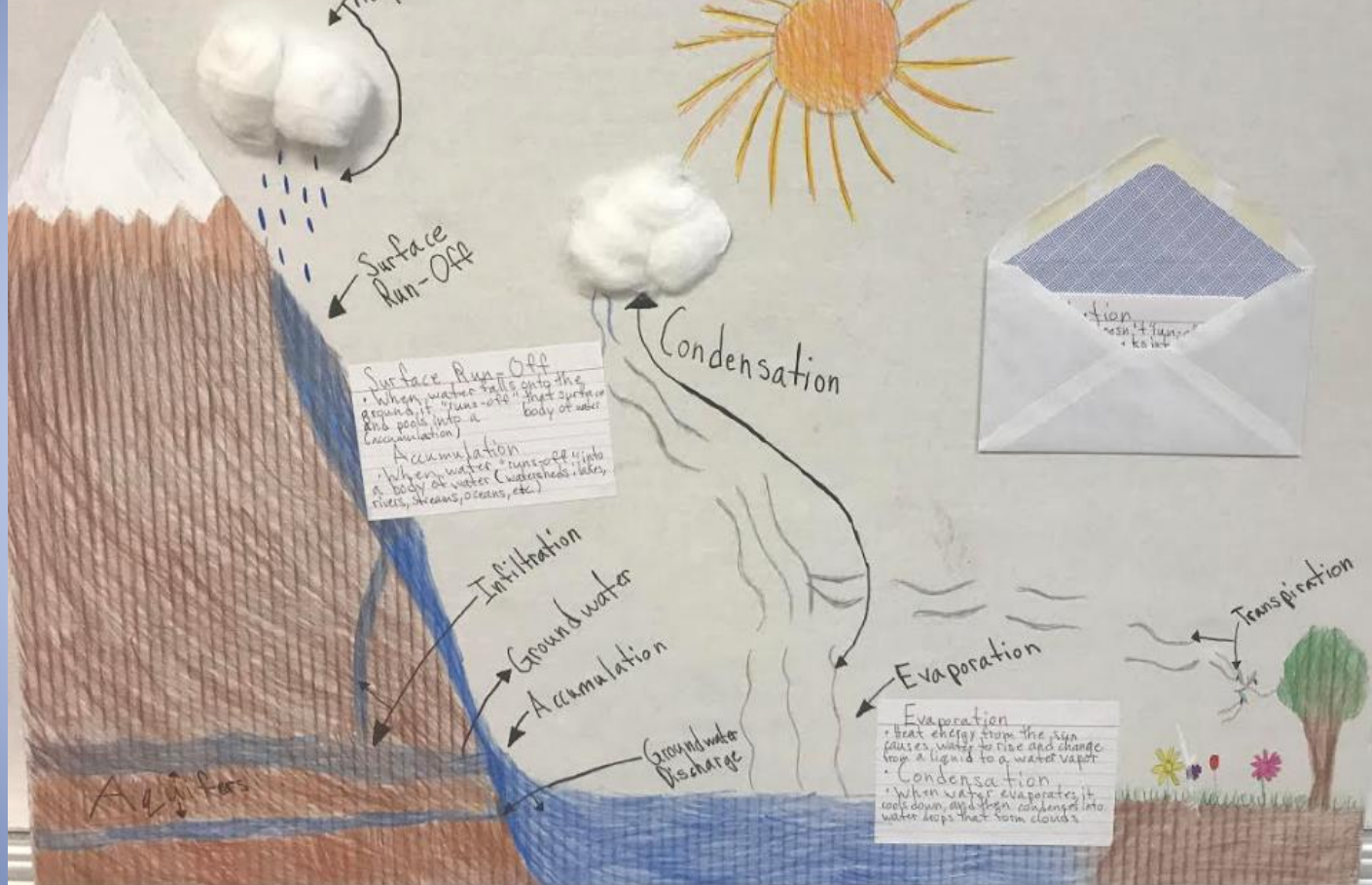
Precipitation
Surface Run-Off

Surface Run-Off
• When water falls onto the ground, it runs off to that surface body of water (accumulation)
Accumulation
• When water runs off into a body of water (watersheds, lakes, rivers, oceans, etc.)

Infiltration
Groundwater
Accumulation
Groundwater Discharge

Evaporation
• Heat energy from the sun causes water to rise and change from a liquid to a water vapor
Condensation
• When water evaporates, it cools down, and then condenses into water drops that form clouds

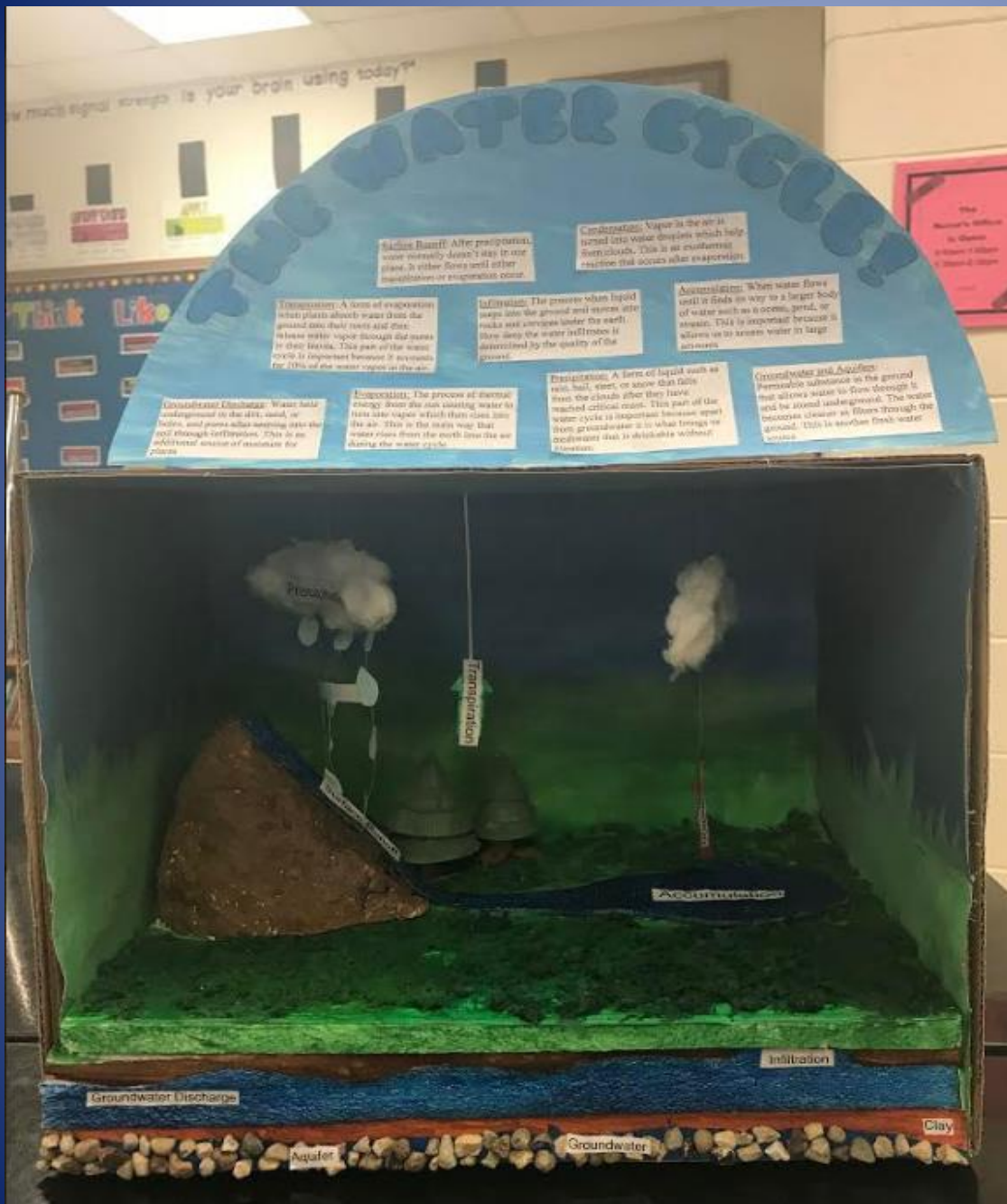
Transpiration



Materials:
Poster Board,
Crayons,
Markers,
Cotton Balls,
Index Cards,
an Envelope.

Easy to find
materials.

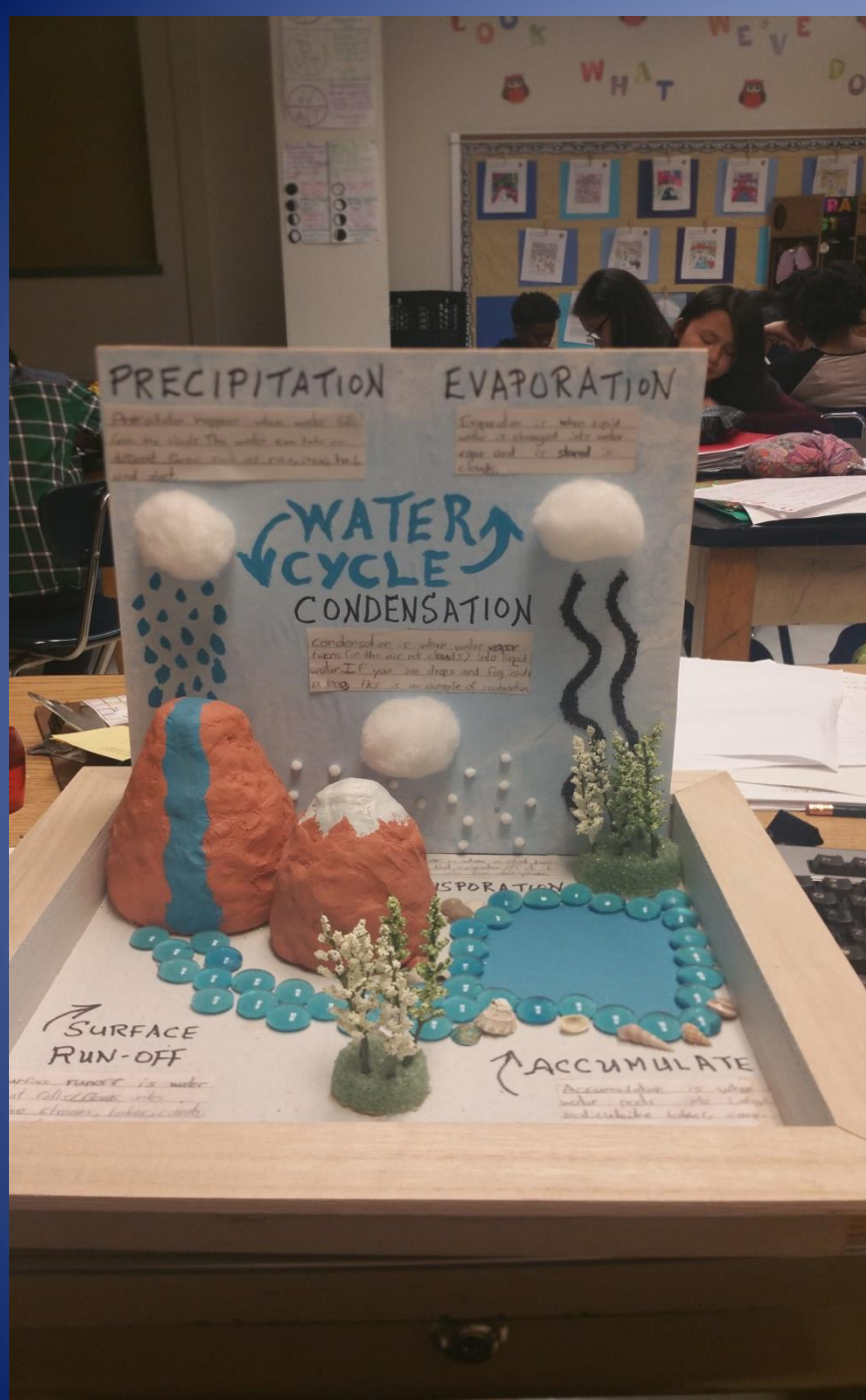
Creative way
to display
explanations.



Old-fashioned box diorama.

Materials: Cardboard Box, Paint, Cotton Balls, Construction Paper, Fake Plants, Salt Dough, Tape, Index Cards

Makes a great visual.



3-D Model

Materials: Plywood, Craft Pom Poms (various sizes), Glass Beads, Salt Dough, Paint, Styrofoam, artificial plants, sea shells

More materials but most are easily found around the house or inexpensive to purchase. Creative, thoughtful representations of each stage (Be sure to proofread the spelling on your project though!)

The proper adhesive makes a BIG difference. Use an adhesive that is best for the materials you choose.



Mod Podge:
Available in multiple formulas for various uses. Great for decoupage, paper, wood, and fabric applications. Available at most craft stores



Glue Sticks:
Convenient and easy to find. Available in multiple sizes. Best for sticking paper to paper.



Rubber Cement:
Good for long term bonds on most types of paper including photo paper, typing paper, wrapping paper, construction paper, etc. Easily found near the normal school glue in most stores.



Hot glue:
Cheaper than you may think. Mini glue guns like this one costs less than \$5 at most craft stores. Works on various materials including paper, metal, fabric, and more. But be careful—it's HOT!

More Adhesive Options



Spray Adhesive:
Best for bonding lightweight materials such as paper, cardboard, foam and fabric. Dries clear. Fairly inexpensive (<\$5/can)

Glue Dots:
Available in small and large sizes. Mess Free and easy to use. Works best on paper projects.



Tape:
Many different varieties (masking, packing, duct, electrical, transparent, etc.). Always check the packaging to determine what each type bonds best with. Usually ineffective when wet.

Super glue:
There are tons of brands of super glue available. Strong Hold. Bonds ceramics, wood, metal, and other heavier materials. Dries quickly (45 seconds or less).

