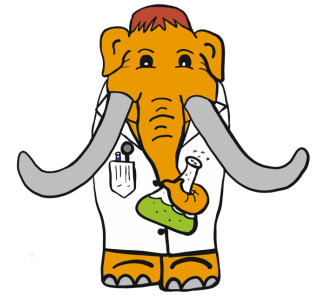


# Science Saturday @ Home

## The Art of Absorption/Desorption



### Gathering Supplies:

Watercolors	Brushes	Water
Thick Paper	Scissors	White Crayon
Paper	Wax Paper	Aluminum Foil
Paper Towels	Dropper/Straw	

### How To Steps:

Another of water's properties is Absorption/Desorption. Explore how water acts on different materials and use these properties to make some ART!

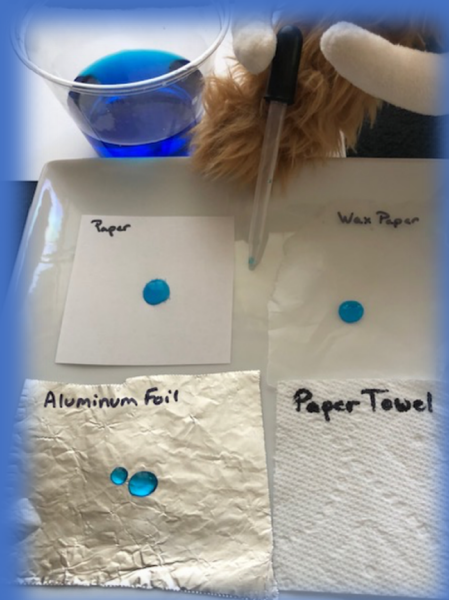
#### How Does Water Act On Different Materials?

1. Cut out small squares of paper, wax paper, aluminum foil and paper towel.
2. Place the squares on a plate, or tray. You can label them if you want.
3. Take a dropper, or straw if you don't have a dropper, and let a few drops of water fall onto each square.
4. Do the water drops act differently on the different squares? What does the water drop look like on the wax paper, compared to the paper towel? What you are seeing is the difference between absorption and desorption!
5. Absorption can happen at different rates so leave the drops there for a bit and check back on the squares. Which water drops are still there?

#### Making Art Using Absorption and Desorption

1. Take a white crayon and some thick paper or watercolor paper. Draw a picture or design using the crayon. Since crayons are made of wax, where you draw with the crayon's wax will stop the water from being absorbed by the paper.
2. Use your watercolors and brushes to paint over the whole paper including the wax. Try using the 3 primary colors of red, blue and yellow and see what other colors show up as your paints mix.
3. Look closely. Can you see how the water droplets just sit on top of the areas covered with wax?

# Water Art with Max



## Did You Know?

Water is pretty cool! It exists in all 3 states of matter, as a liquid, a solid and a gas. Water is also called the universal solvent because so many substances will dissolve in it. Think about when you mix sugar into your ice tea and it disappears. The sugar is dissolved into the water. Some other properties of water are listed below.

1. Cohesion/Adhesion: Cohesion is when water molecules want to bond together. Adhesion is when water molecules want to bond to something else.
2. Surface Tension: The tight top layer of water that forms due to strong cohesion of water molecules.
3. Absorption/Desorption: Absorption is when water becomes part of something else. Desorption is when water is repelled and does not become part of something. Paper is made of fibers that can absorb water, whereas aluminum is made of a metal at water can't be absorbed by so the droplets just sit on the surface.

Can you think of some experiments that let you see the different properties of H<sub>2</sub>O?