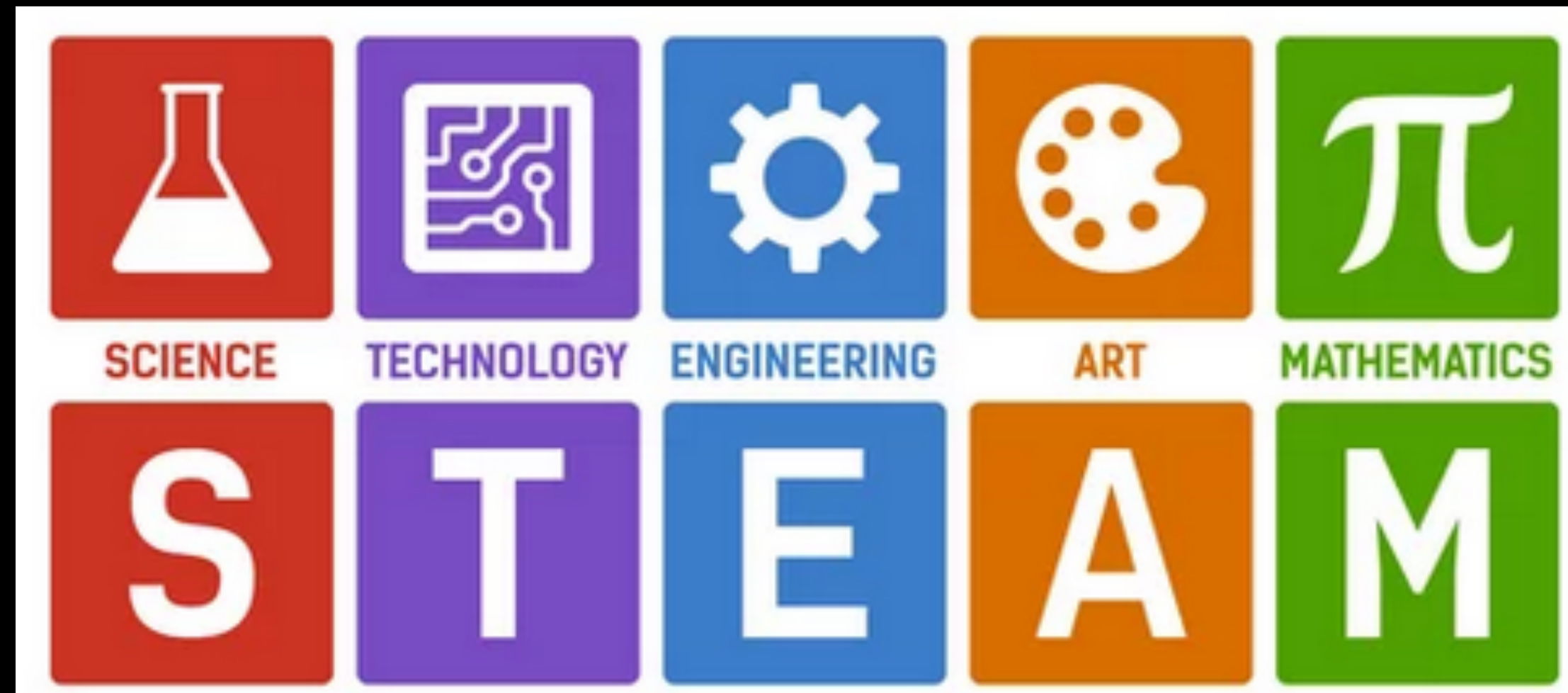
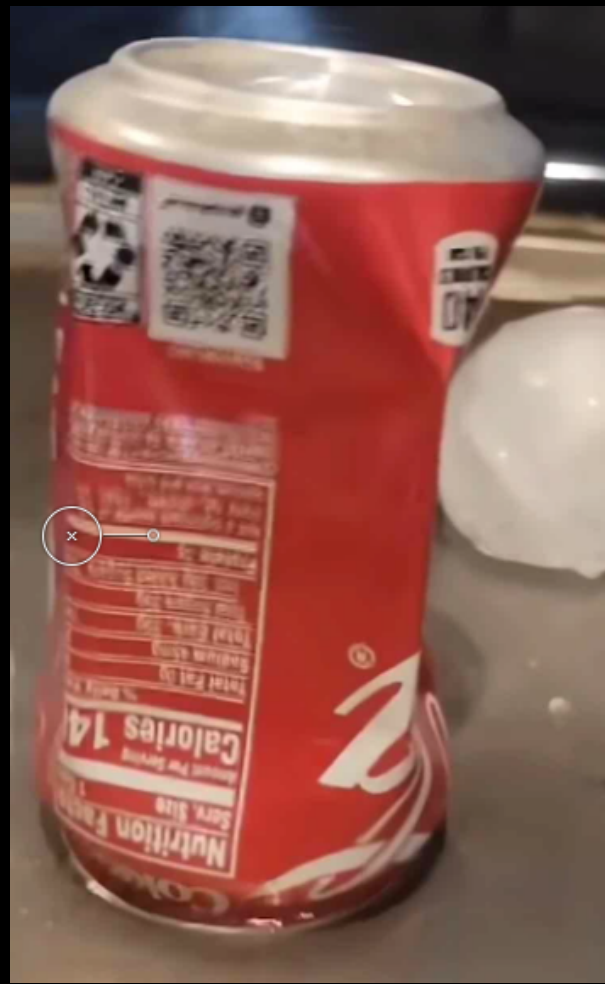


Phenomena



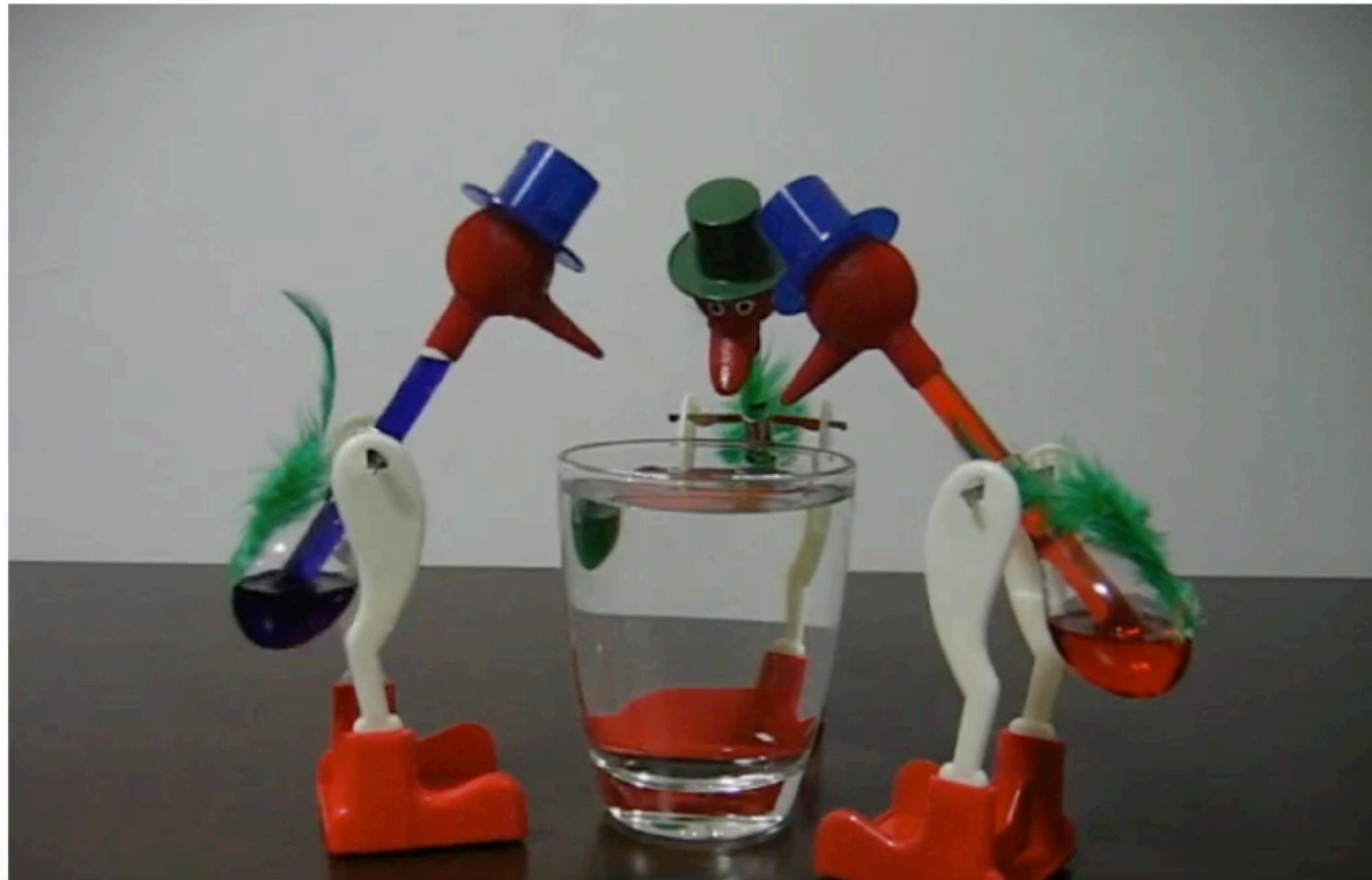
Phenomena

What is it?

- Observable Events
- Not easily explained
- Focus learning away from *learning about* to *figuring out*
- In nature or not

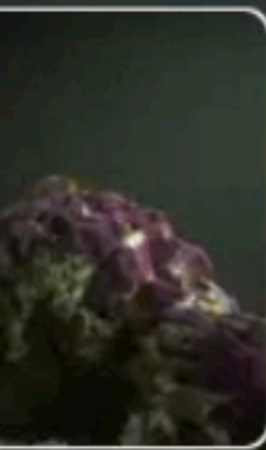


Drinking Birds

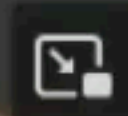




seeking



nie

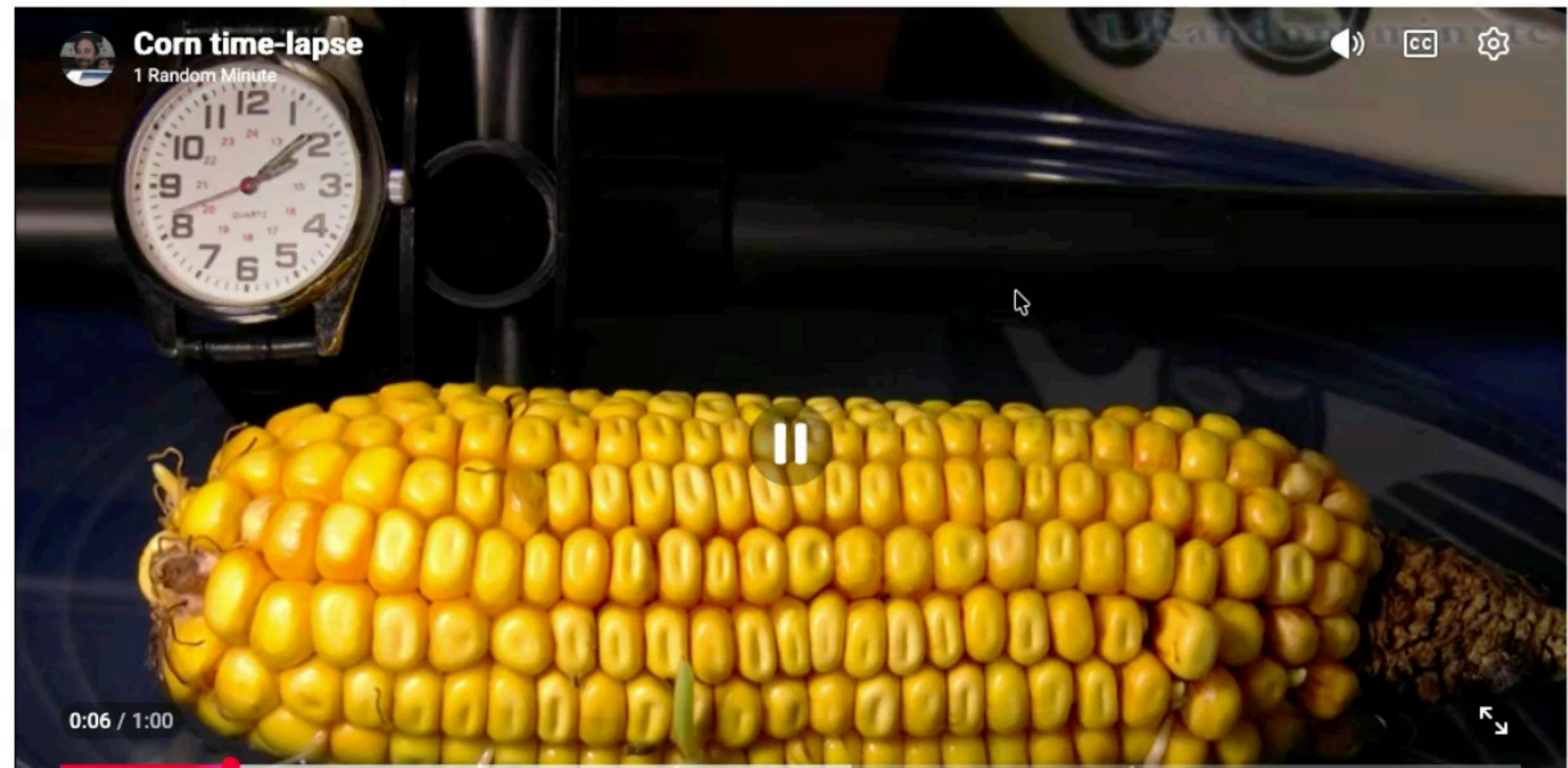


**Rub your feet on the
carpet then touch
something metal**

Static Electricity



Time lapse of corn sprouting



Can Crush.



Barrel Crush



Balloons and air pressure



Ping pong ball in flowing water



Suspended ping pong ball



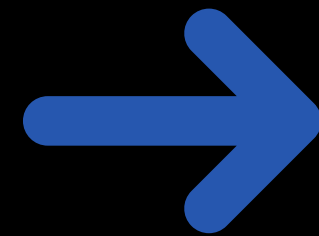
Phenomenon Event



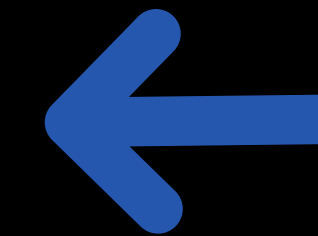
Observe, Engage, Explore, Ask Questions,
Research, Evaluate, Explain



Phenomenon Event



Phenomenon Event



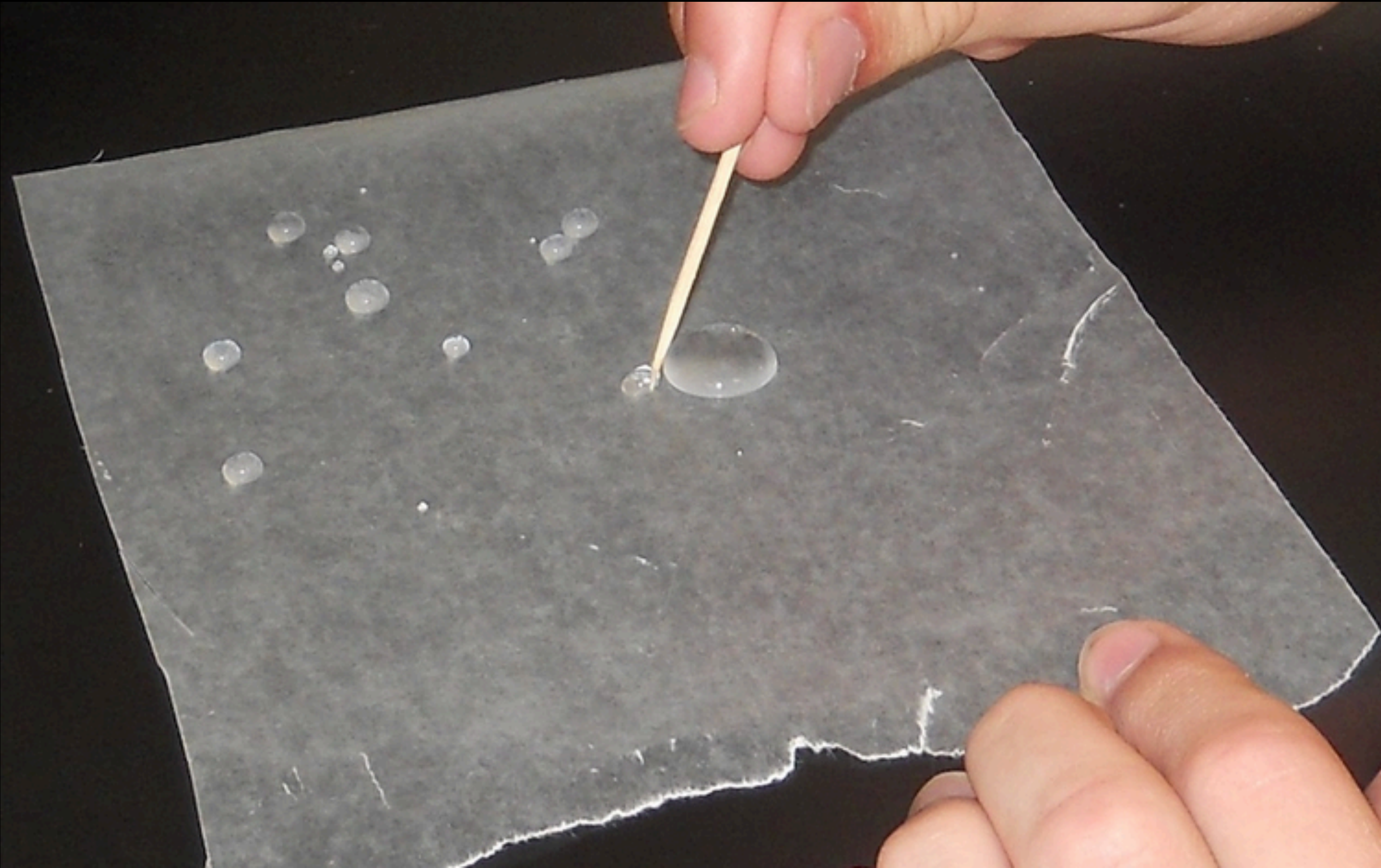
Water Strider

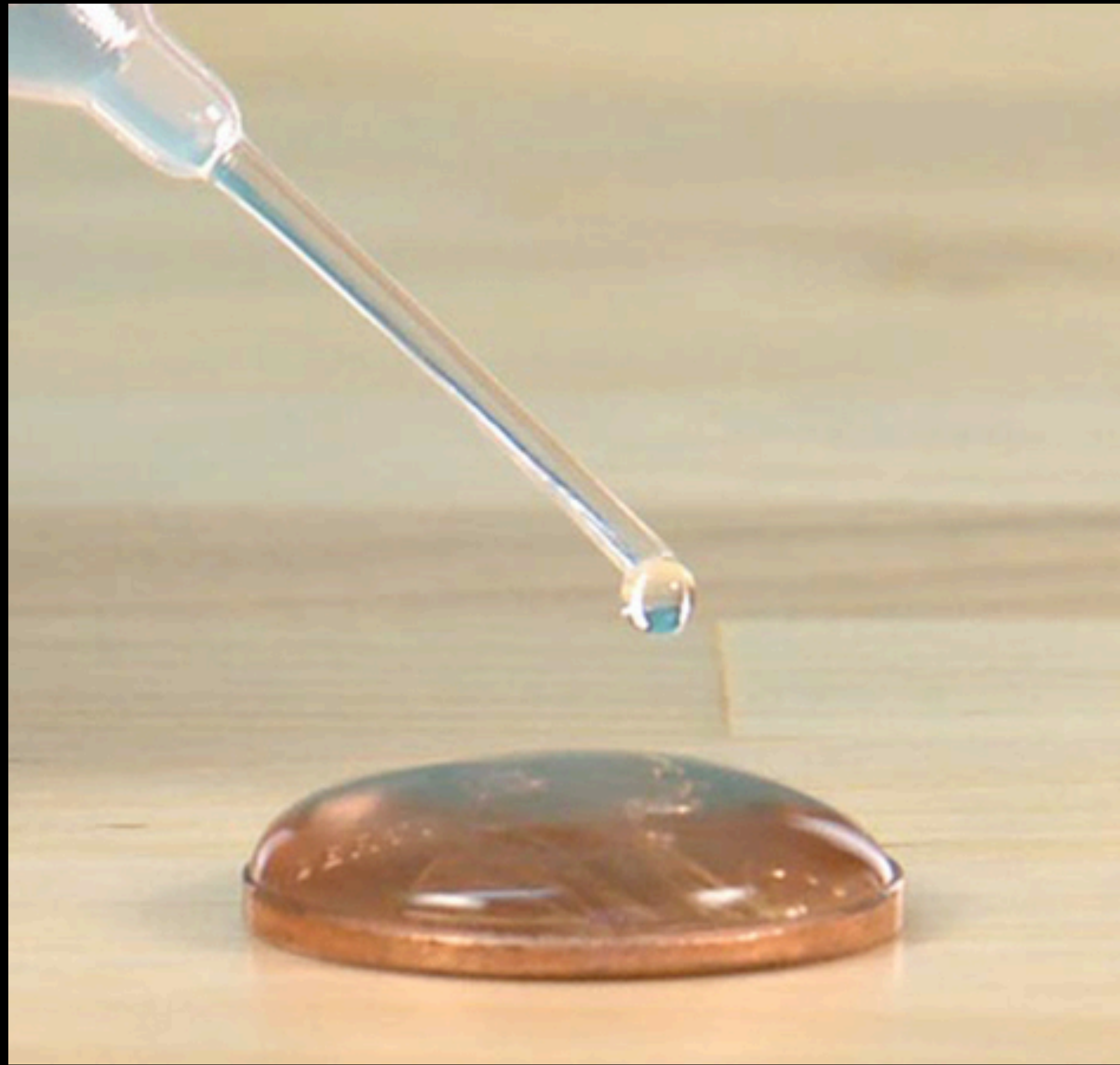


Observe

Ask Questions

Exploration






Exploration

Testing Ideas

Asking Questions

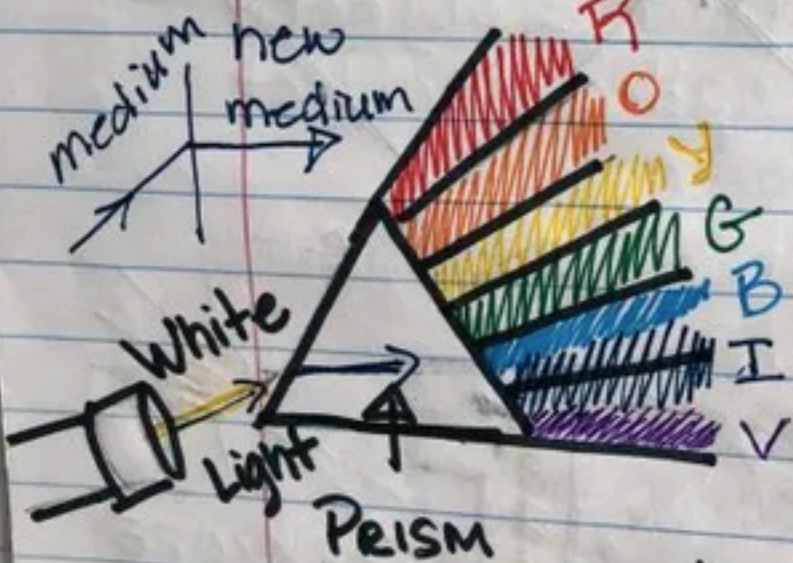
(40) REFRACTION

The bending of light rays as they pass from one medium (substance) to another.



The pencil appears broken because the light bends as it passes from air to water.

ROY G. BIV




White Light PRISM

medium new medium

R O Y G B I V

WHAT ABOUT A RAINBOW IN THE SKY?



water drop

When light is transmitted through a prism, it refracts and bends into the color spectrum.

Making Observations in a Notebook



Sense Making/Explaining

Is attracted to itself

Beads up



Forms a skin on the top

ADHESION



Sticks to other things

COHESION



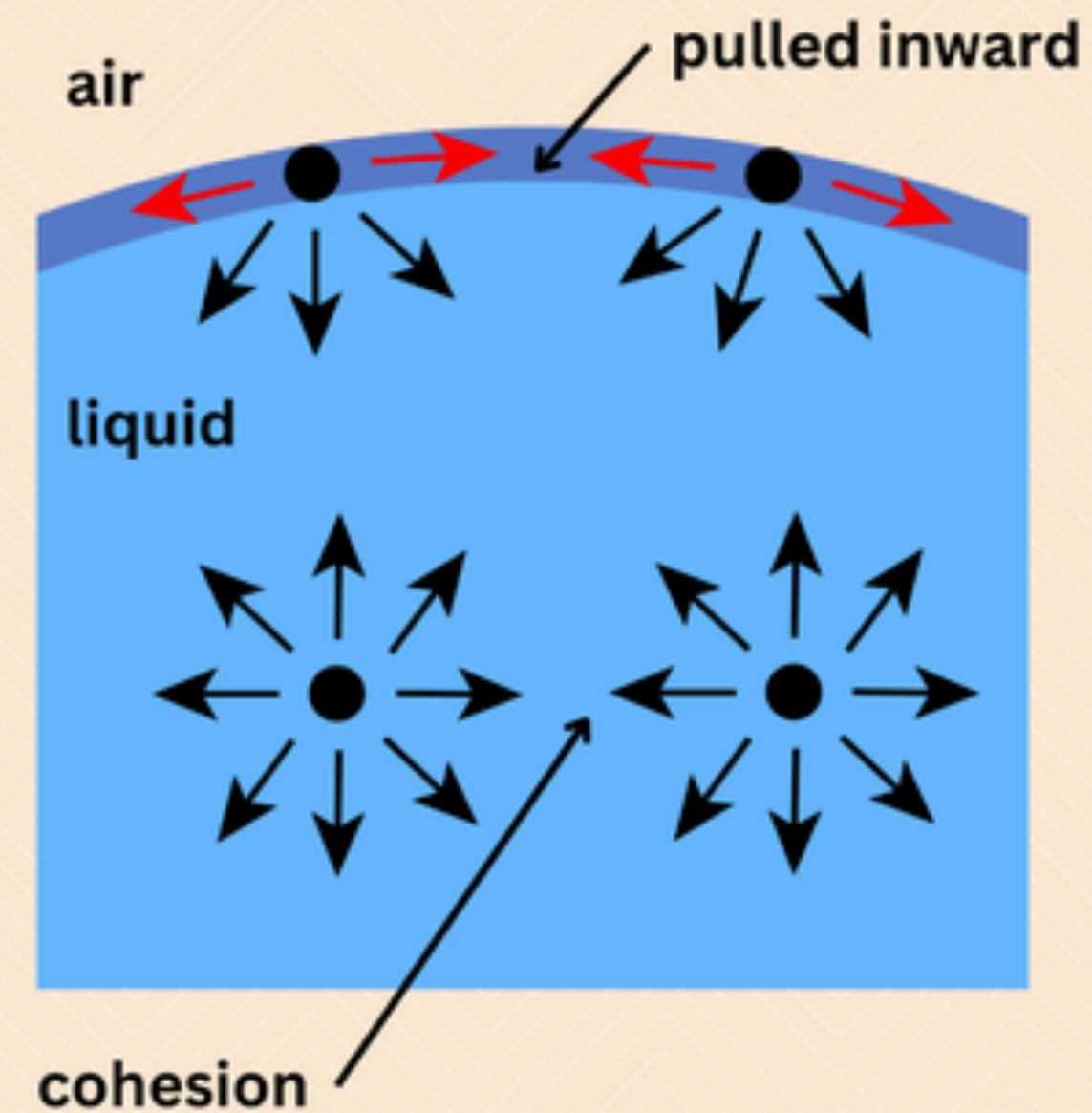
Sticks to itself

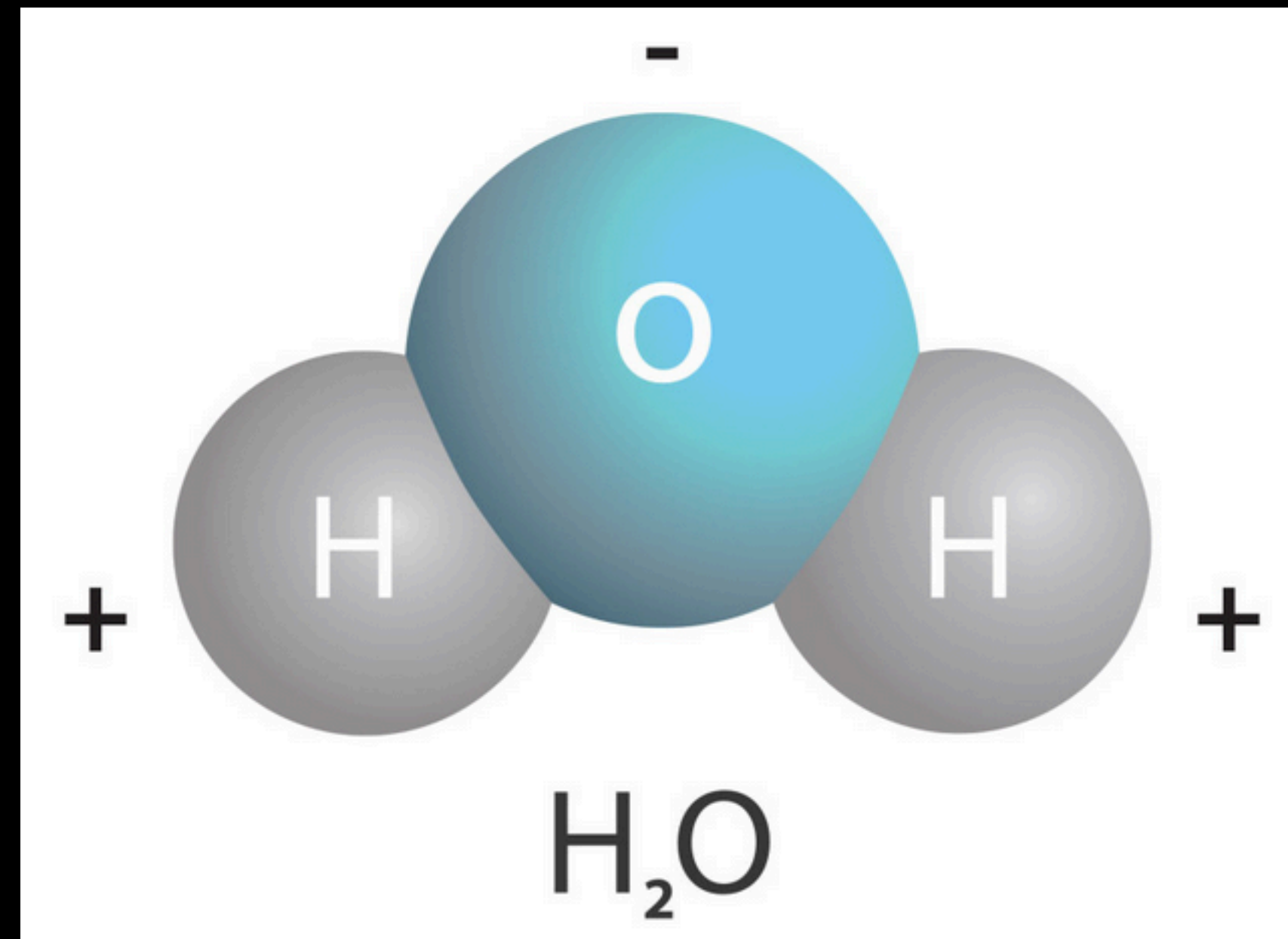
“Acts like a magnet”

Surface Tension

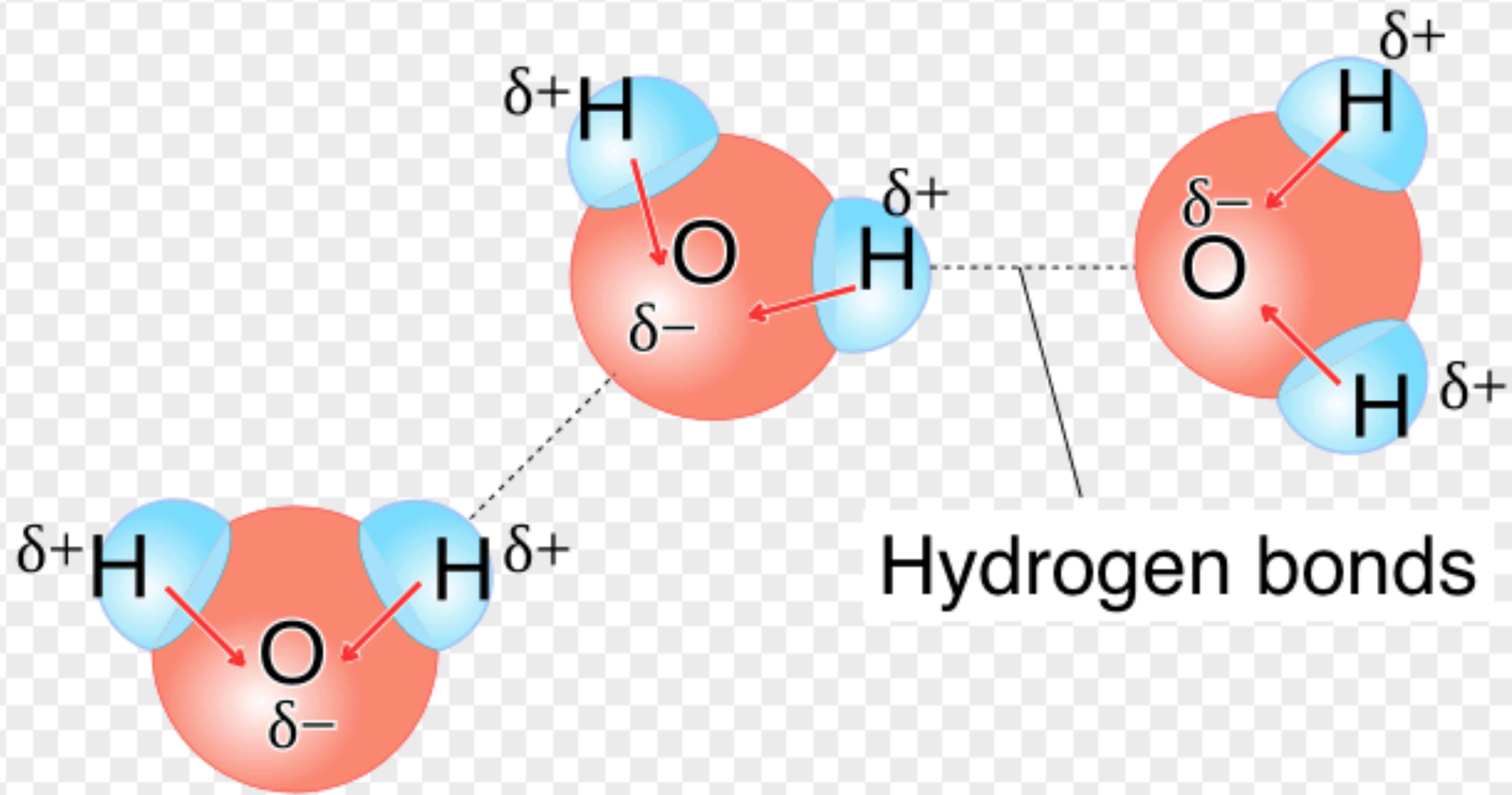
Surface tension is the tendency of liquid surfaces to shrink to the minimum surface area due to cohesive forces.

- Bulk molecules are pulled from all directions
- Surface molecules are pulled inward





Polarity of water





Model the phenomenon



Explain the phenomenon



Engage, Explore, Ask Questions,
Research, Evaluate, Explain



Phenomenon Event

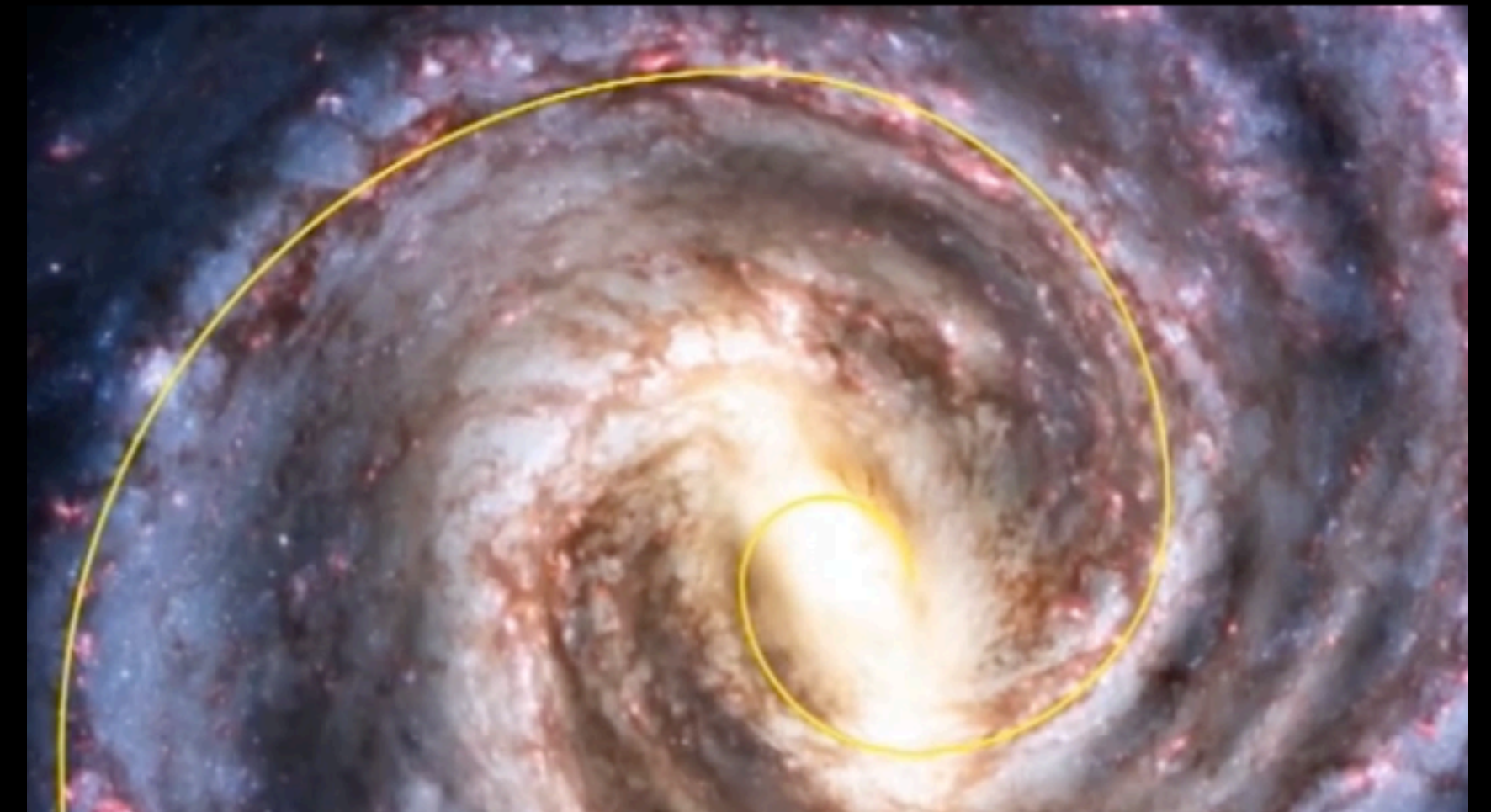
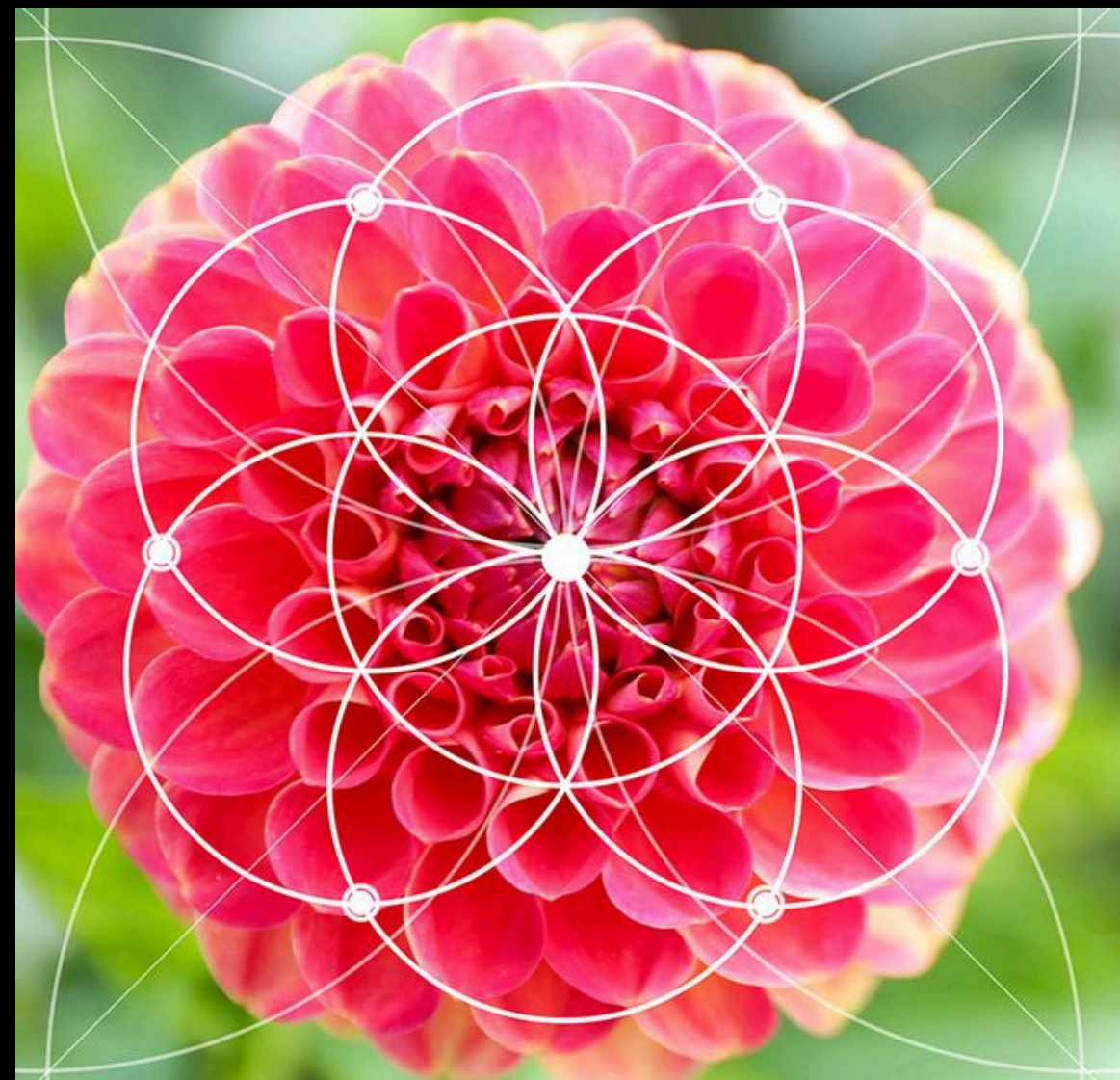
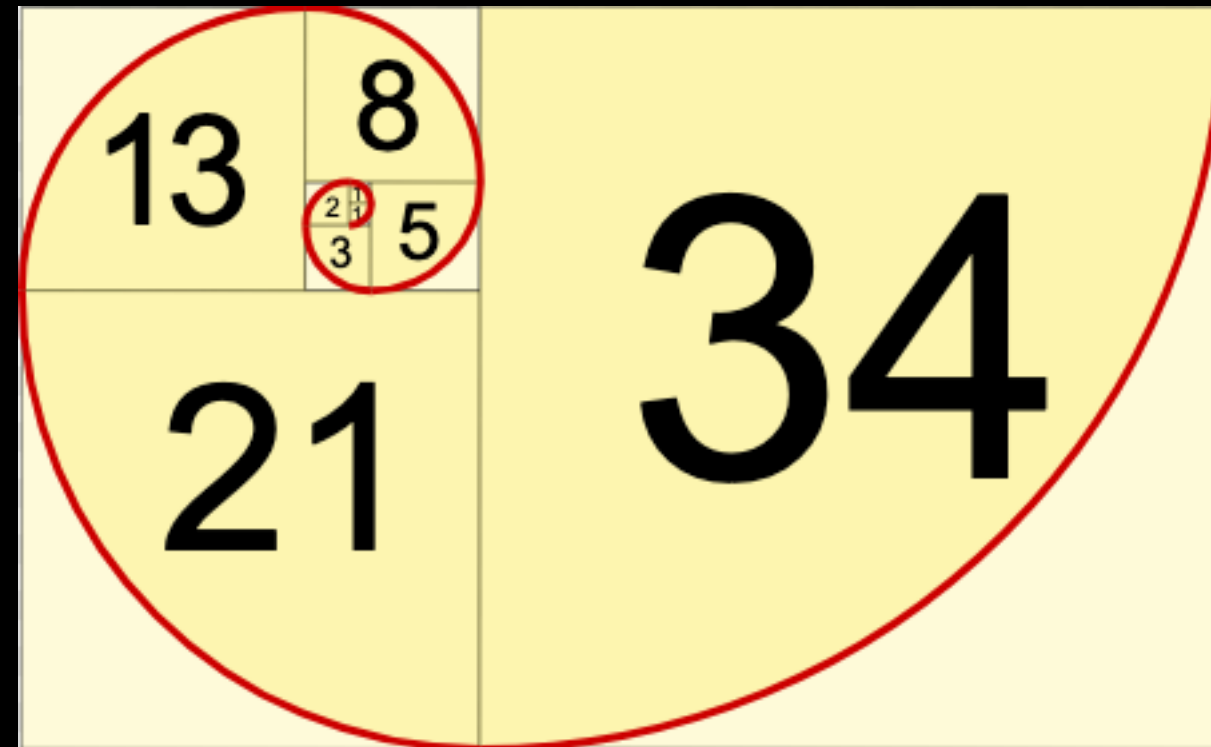


Phenomenon Event



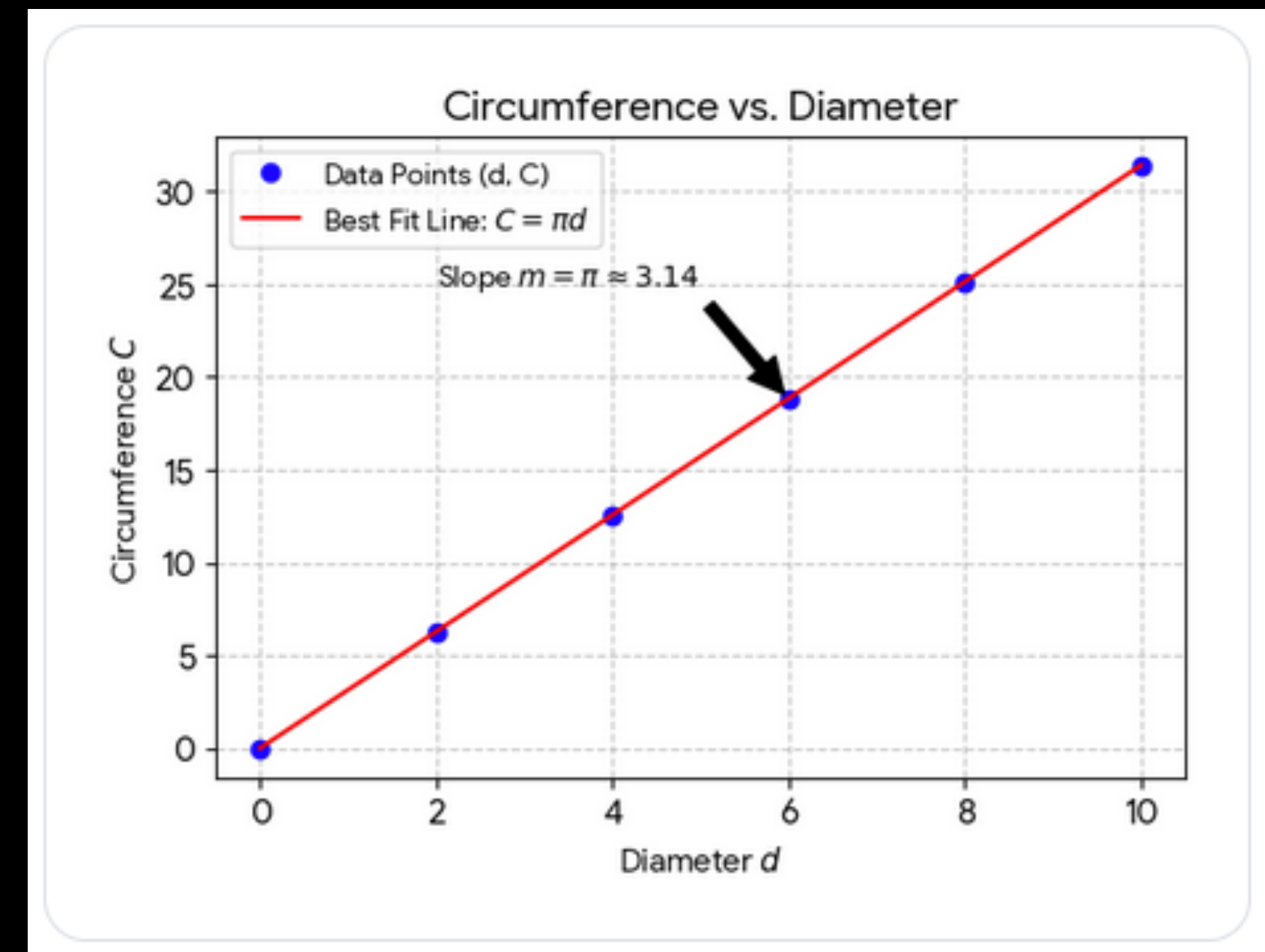
Phenomenon in other STEAM subjects

Mathematics

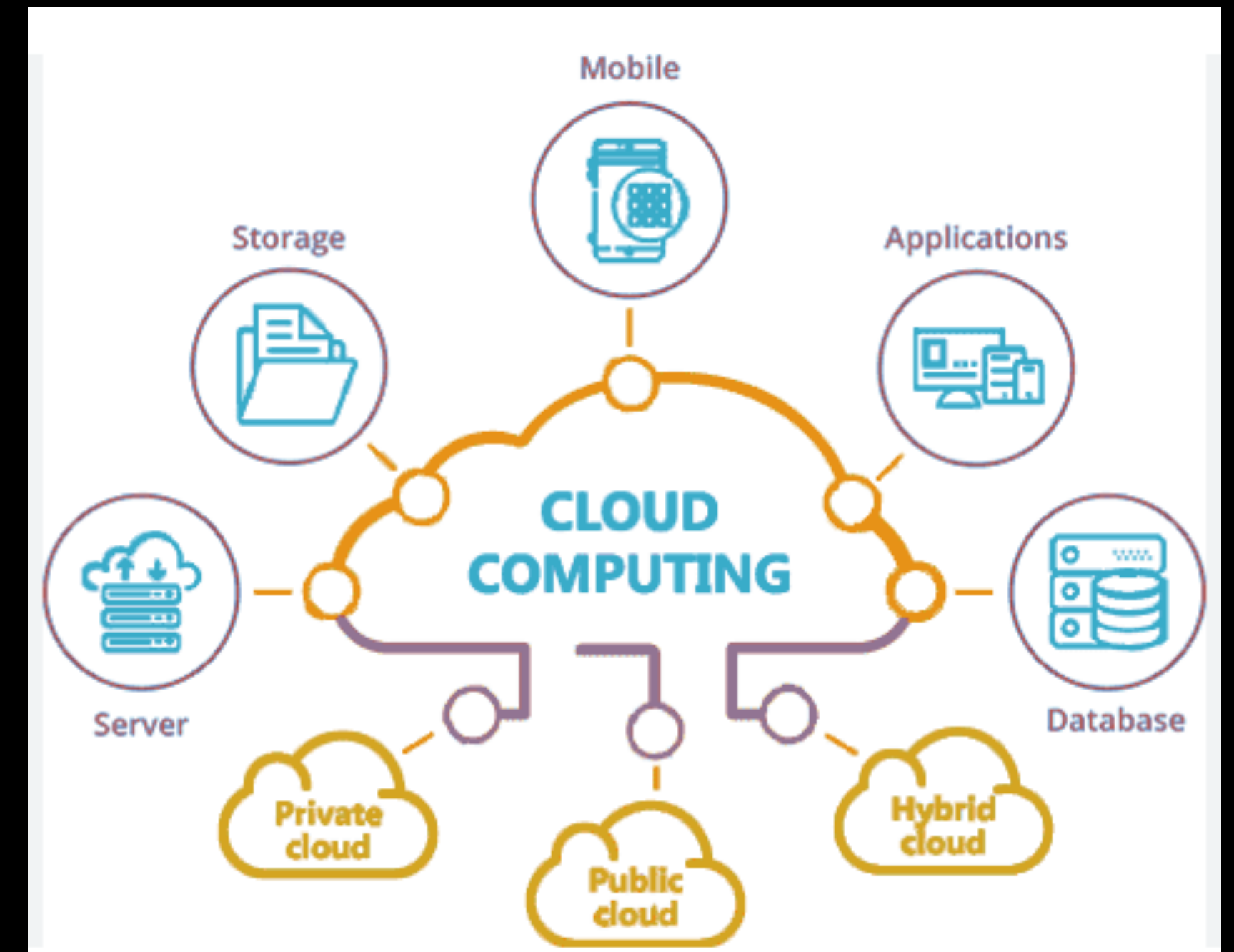
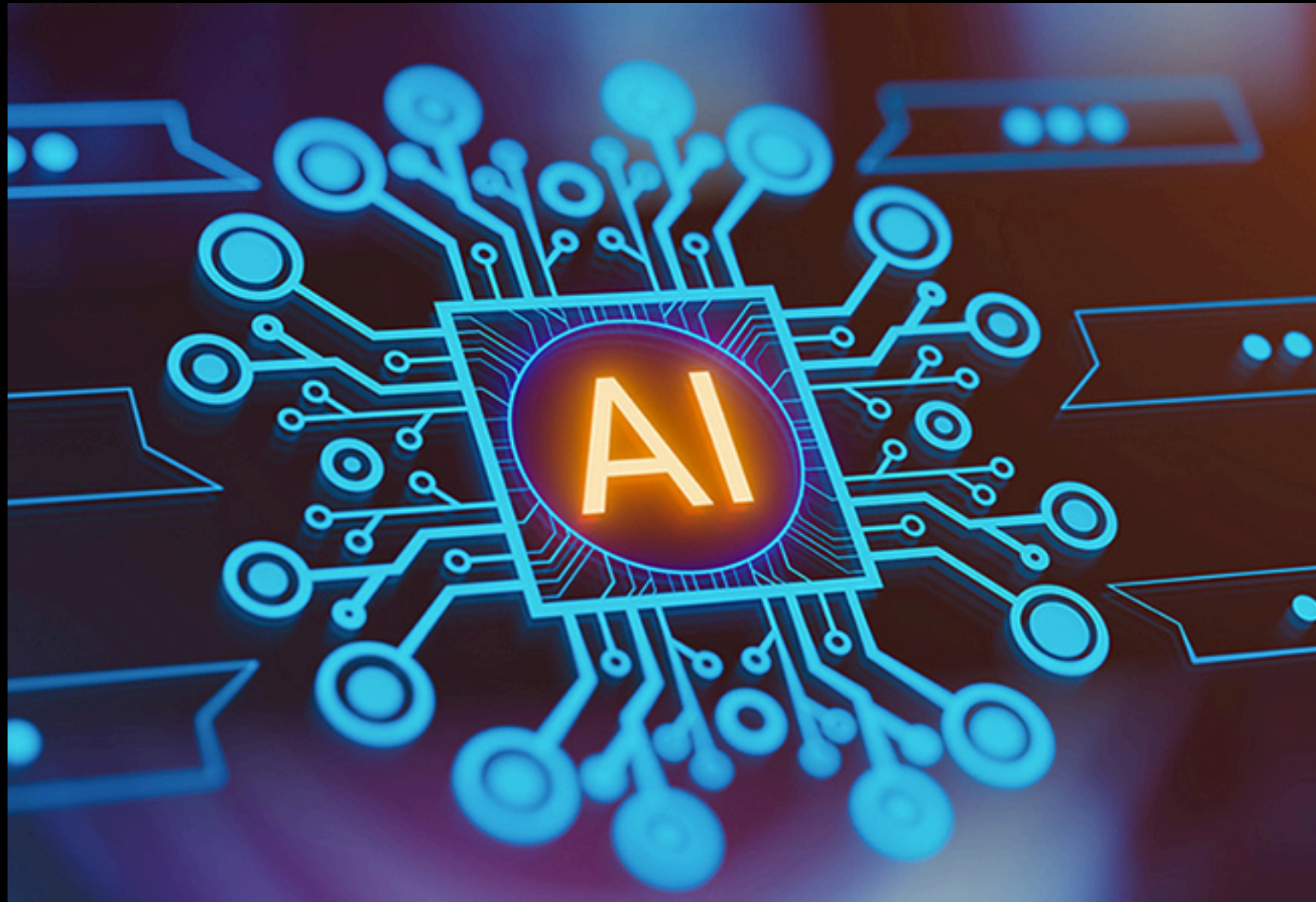


Mathematics

DISCOVERING PI



Technology



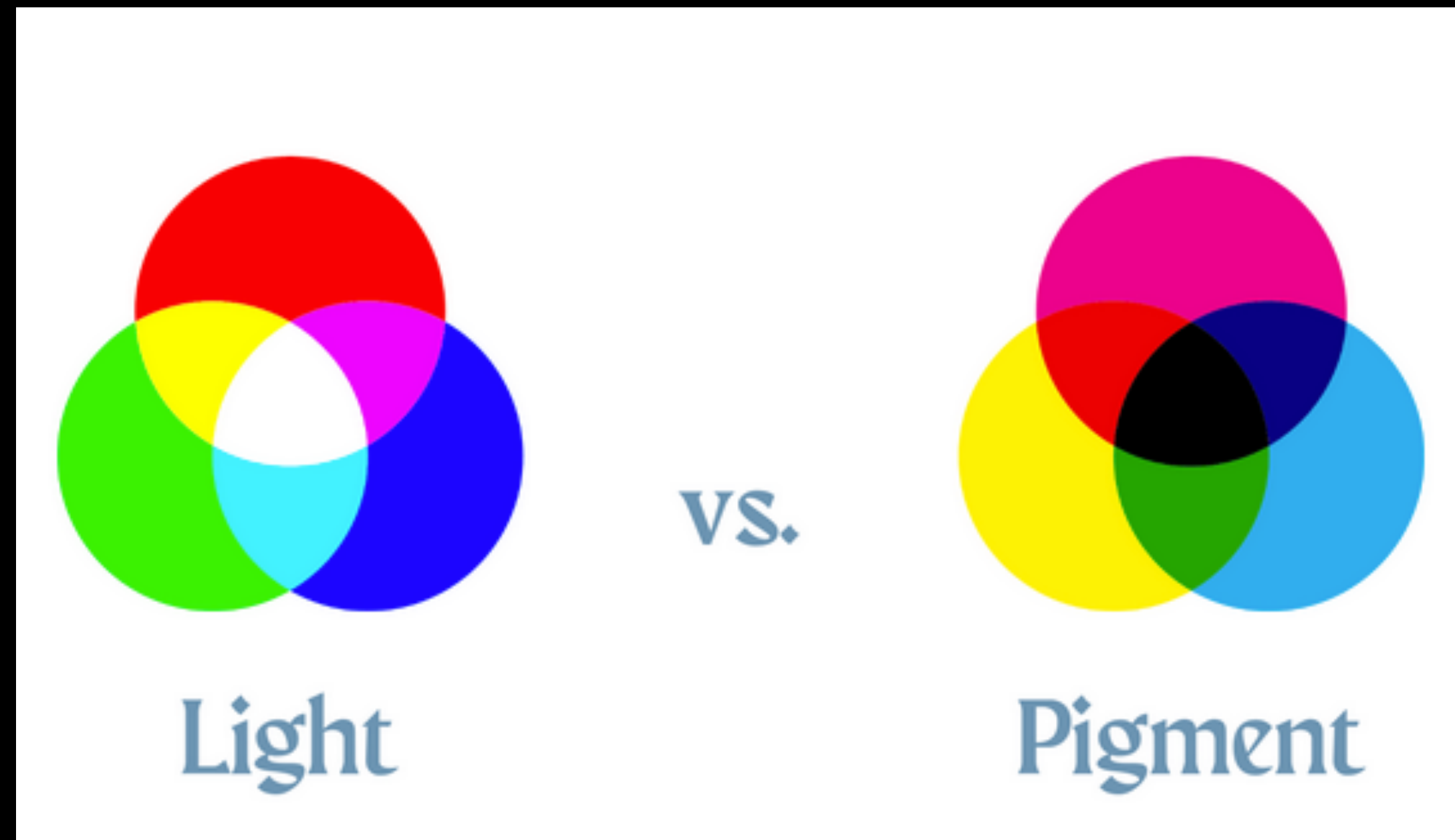
Art



Pareidolia



Primary colors of light versus pigment



Engineering






Thank you



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A photograph of a mountain landscape with a person in a green jacket standing in the foreground. A yellow arrow points down from the center of the image to the navigation menu below.

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