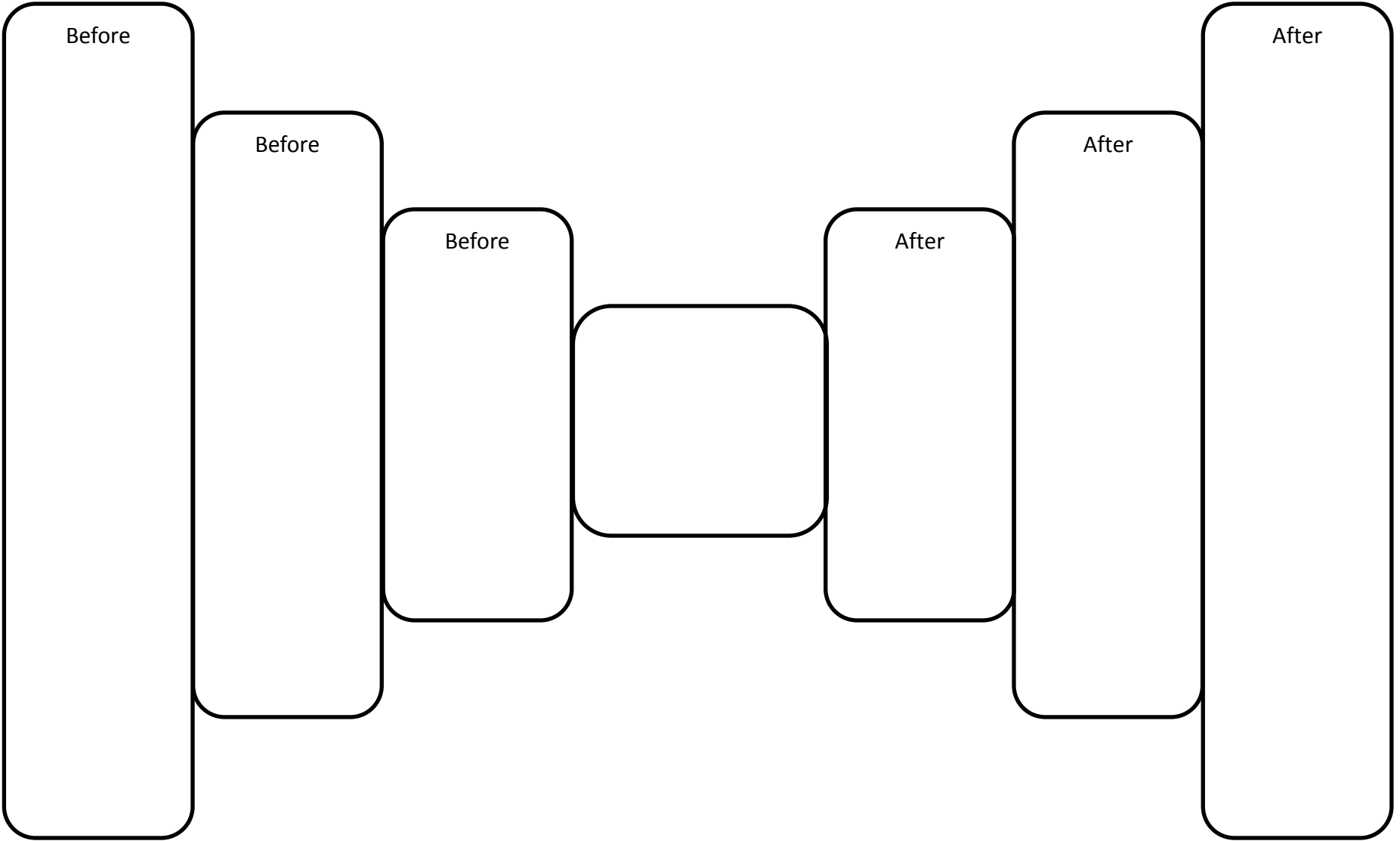


Pathways Tool



Drivers and Constraints Tool

Where does the water **start**?

Where can the water **go**? What is the **process**?

What **drives or moves** the water? How?

What are the **constraining factors**, and how do they work?



Scale Tool

Atomic-Molecular

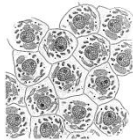
Not visible
Nanometer
or smaller
($<10^{-9}\text{m}$)



Molecule

Microscopic

Visible with
microscope
(10^{-8}m to 10^{-4}m)



Cells

Macroscopic

Visible with naked eye
Millimeter (10^{-3}m) to Meter (10^0m)
to Hectometer (10^2m)



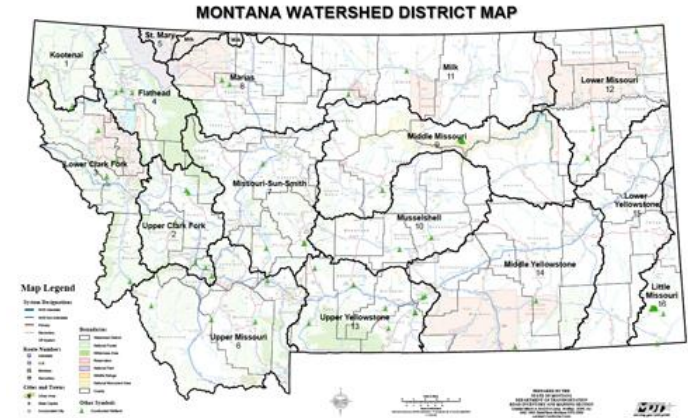
Water
Drop



Football Field

Landscape

Larger than what you can see at once
Kilometer or more ($>10^3\text{m}$)



Watersheds

Tracing Mixtures with Water Tool

Substances mix and unmix with water and water moves through systems. How does this work?

Tracing Back

Where did the substance come from?

Where did the water come from?

How did the substance get into the water?

The Mixture

What's mixed in the water?
(Teacher provides)

Where is the mixture now?
(Teacher provides)

What kind of mixture is it?
Suspension or Solution

How do you know?

Tracing Forward

If the water moves (new place)
_____, will the
substance stay mixed with the water?
Yes or No

If no, how and why will it separate?

Where will the substance end up
next?