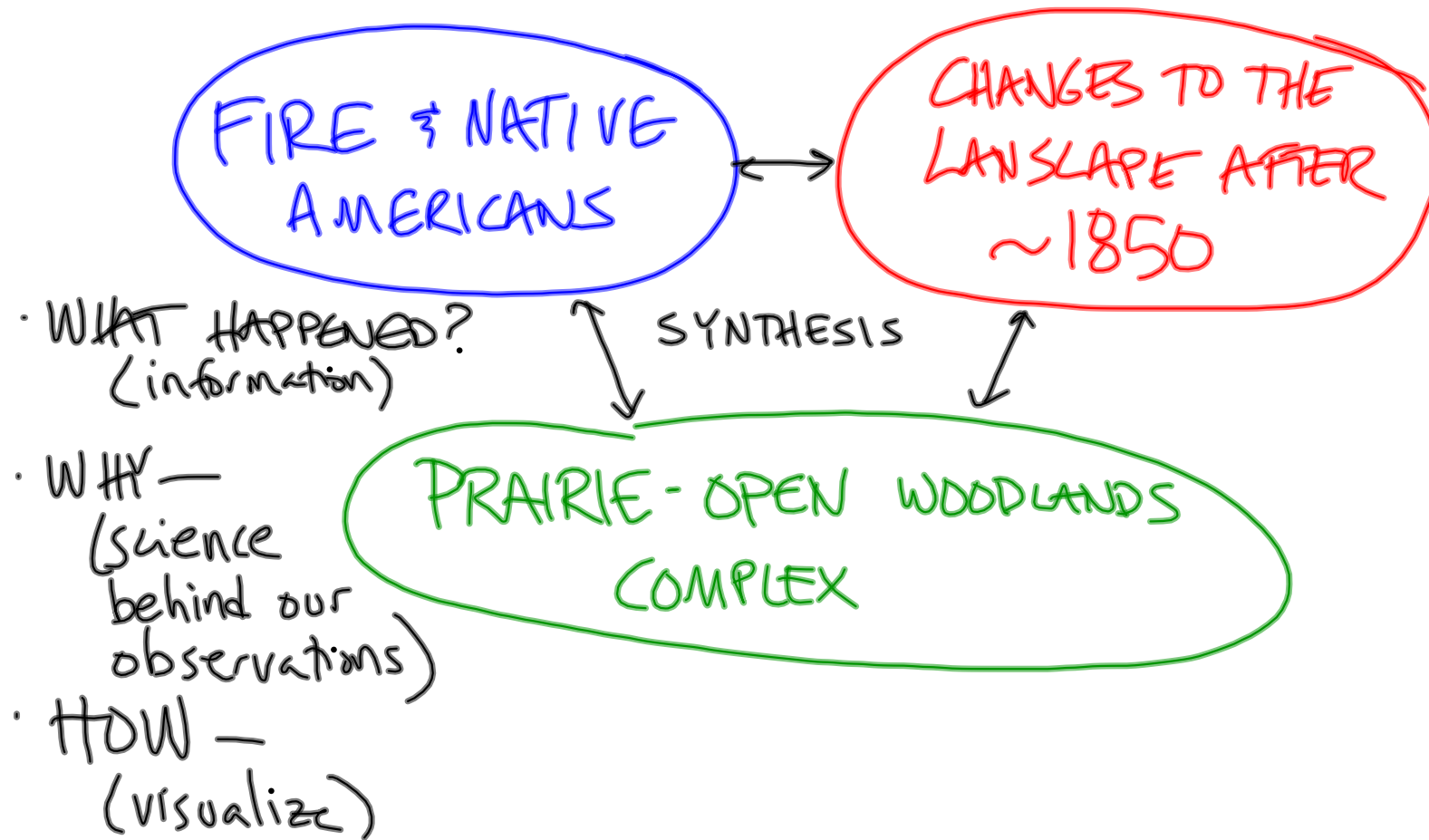


X ASK & ANSWER (WITRS)

X HOW & WHY

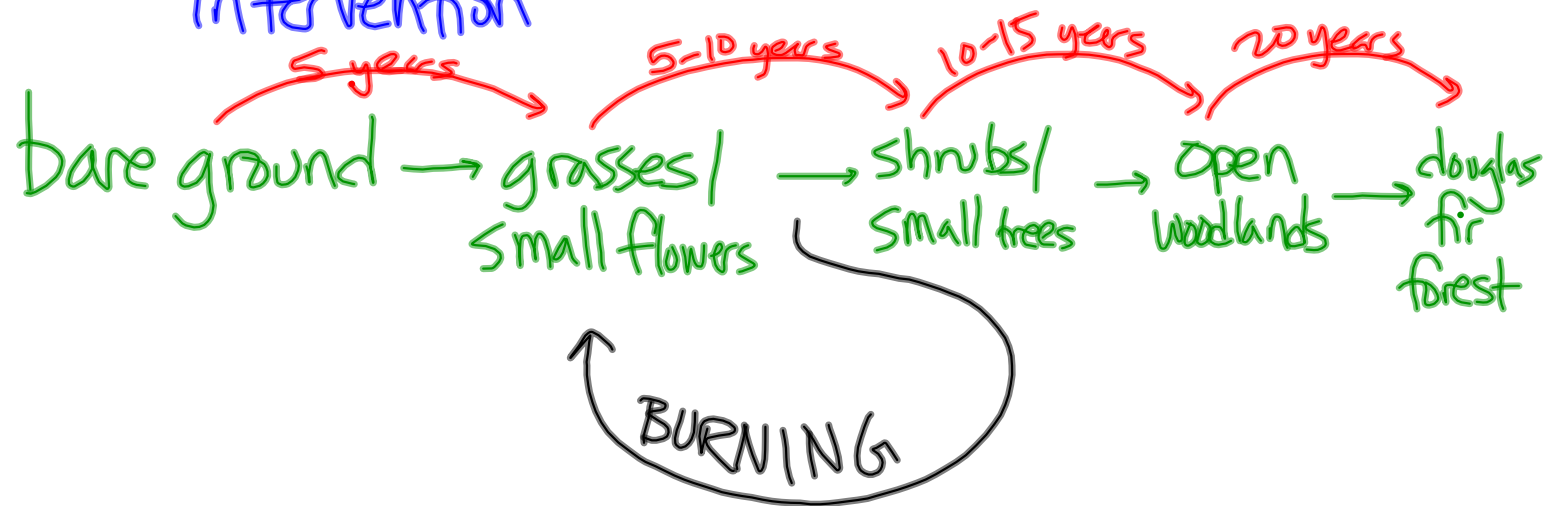
X INTERPRET

X  
X  
X  
KNOW -  
INFORMATION  
GATHERING X



# SUCCESSION:

The predictable change in vegetation that occurs in areas with no human intervention



Why did the European-American settlers  
stop burning?

- Fire  $\neq$  house & permanent settlements
- Fire  $\neq$  farming & agriculture

Why did Native Americans burn?

- Encouraged the growth of useful & edible plants (small=better!)
- Open landscape made hunting easier
- Fire was used to corral animals for hunting

## How fire maintained prairie/open woodlands complex (prior to ~1850):

- ① At the end of the summer, grasses & small flowers would produce seeds & die back.
- ② Native Americans would light fires—that would burn dead plant material.
- ③ Because the fires weren't very hot (due to lack of fuel) they would not burn ① seeds ② large, living plants but they did burn young, newly sprouted trees and shrubs.
- ④ In the spring, seeds would sprout making new grasses, flowers, and baby shrubs/trees.  
(THEN THE CYCLE WOULD REPEAT)

How the lack of fire led to Douglas Fir forests (after ~1850):

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- At the end of summer, the flowers and grasses make seeds and die back.
- With the lack of fire, the small shrubs and trees don't die at the end of summer - after a few years, they've grown significantly
- The shrubs and trees start to prevent the grasses and flowers from growing because they're deprived of sunlight.
- Douglas Firs grow faster and taller than the other trees, so they eventually kill off oaks, alders, maples, and ash trees, forming a Douglas Fir forest.