

# **Welcome to Biology**

**Short  
Wednesday  
8/25/21**



# Unit 1: Science and the Controlled Experiment

continued 8/16/21

*A few more details about the CE...*

**Data** - information regarding how the DV did or did not respond to changes in the IV  
*can be...*

**Quantitative** – typically involves measurement with a tool or counting

*What tools are used to obtain quantitative data?*

*What are some units of qualitative data?*

**Qualitative** – observations with “naked” senses

*What senses are used?*

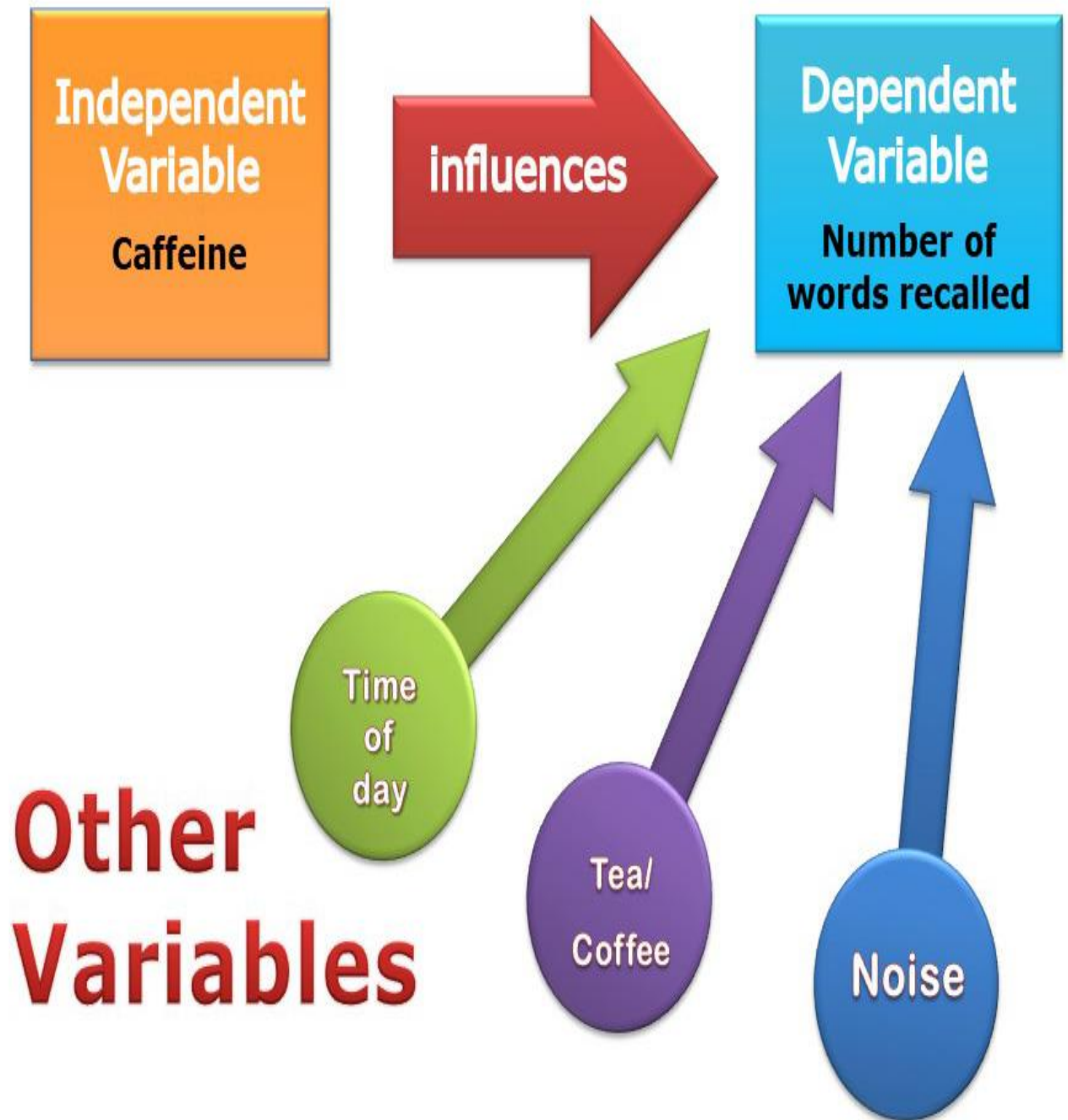
*What are some qualities we might sense?*



## Controlled variables

Any part of the experiment that is not the IV or DV is called a **controlled variable**.

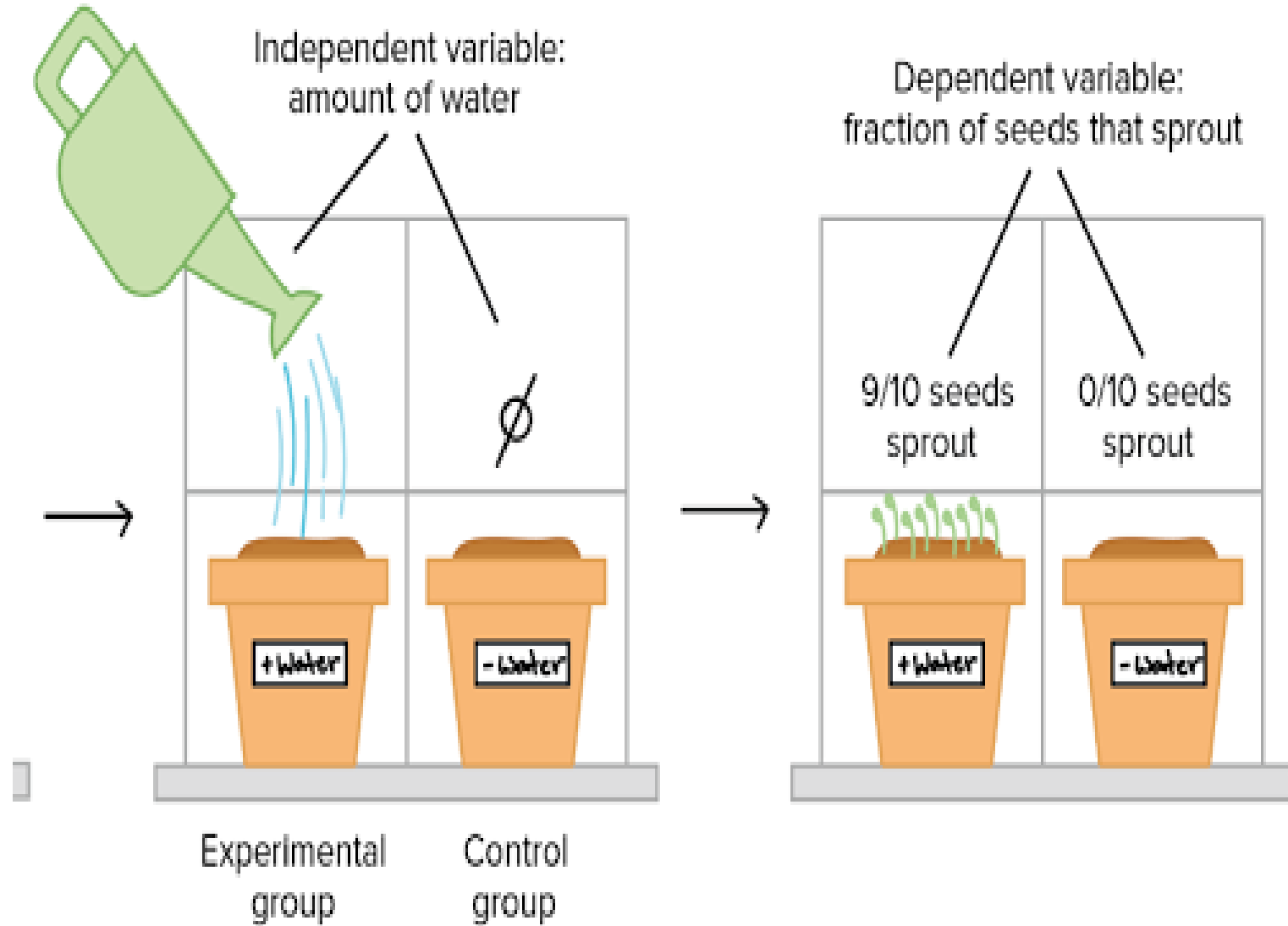
Examples are typically temperature, lighting, volume, etc.



Because these conditions may affect the response of the DV, they are kept the same in both the experimental and control groups (they are controlled).

So CVs are *parts of the experiment that are purposefully kept the same in each group by the scientist.*

The amount of water given will not affect the fraction of seeds that sprout



**Controlled variables??**