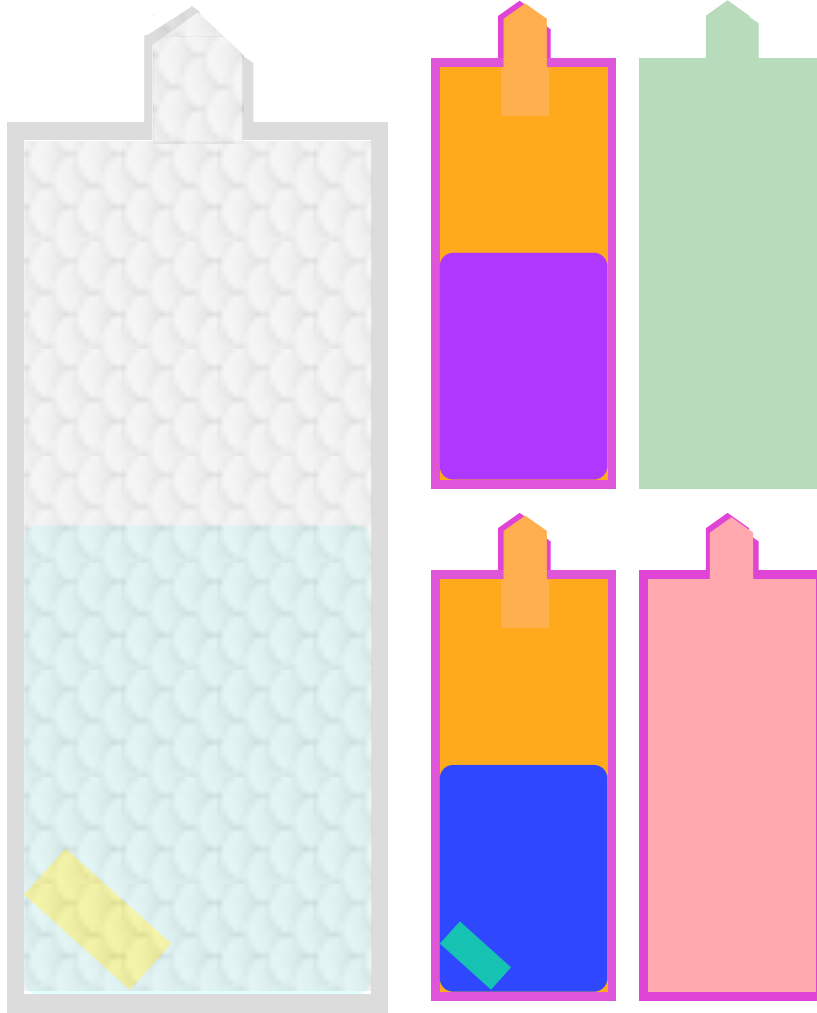


**Plastic bottle with some water and a coin, at an instant of time t**



***all located\_in (IC->R) at t***

- C located\_in LC
- W located\_in LW
- P located\_in LP
- A located\_in LA
- I located\_in RL
- B located\_in GL

***all part\_of (R->R) at t***

- LC part\_of PL,RL,GL
- LW part\_of PL,RL,GL
- LA part\_of RL,GL
- LP part\_of GL

*part\_of reflexive, so all regions part of themselves*

***all part\_of, located\_in, and part\_of relations between ICs***

- I part\_of B
- I located\_in B
- C located\_in I
- C located\_in B
- C contained\_in I
- A located\_in I
- A located\_in B
- A contained\_in I
- W located\_in I
- W located\_in B
- W contained\_in I

*part\_of, located\_in reflexive, so all ICs part\_of themselves*

*IC = Independent continuant  
R = Spatial Region*

**Material Continuants**

- C** Coin
- W** Water
- P** Plastic
- A** Air in convex hull
- B** bottle

**Spatial Regions**

- LC** Location Coin
- LW** Location Water
- LP** Location Plastic
- LA** Location Air in convex hull
- PL** "purple" Location Water + Location Coin
- RL** "red" Location Water + Location Coin + Location Air in convex hull
- GL** "green" Location Water + Location Coin + Location Air in convex hull + Location Plastic

**Sites**

- I** interior of bottle

Notes:  
Bottle = Plastic (wall of bottle) + interior of bottle  
No relation of water to coin is unsatisfying