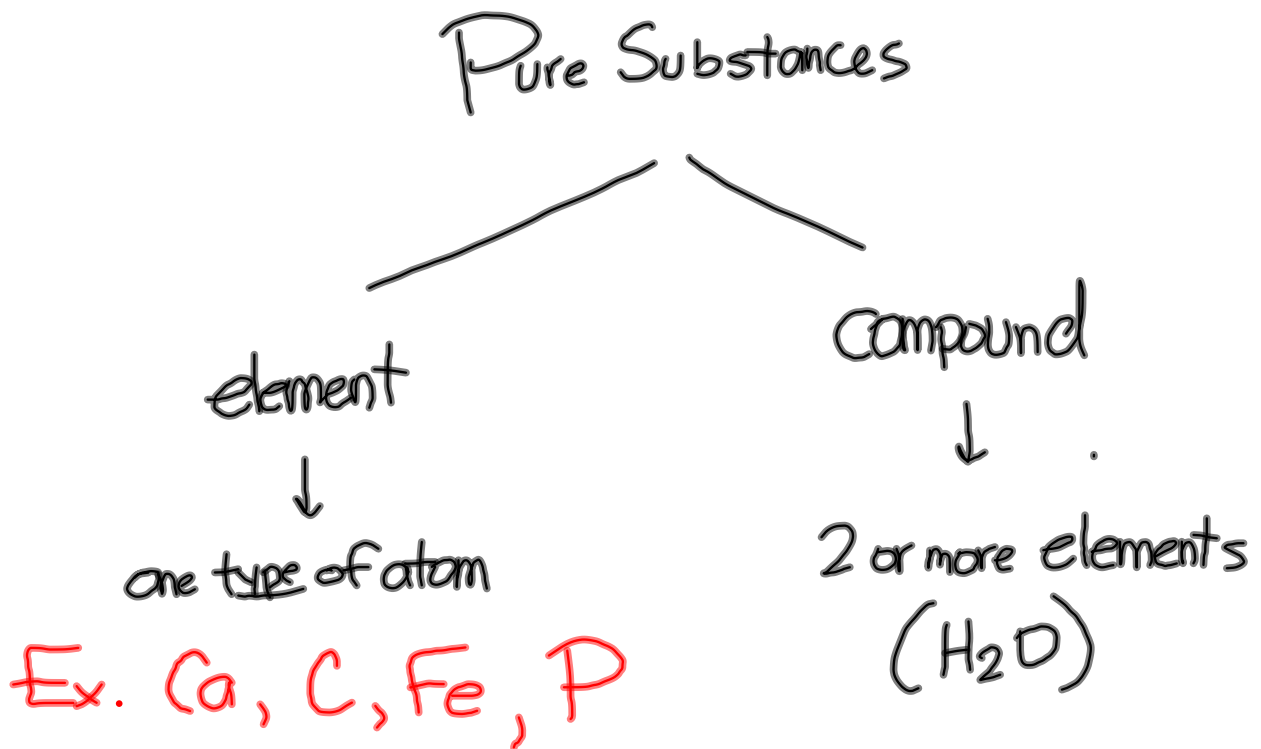


Yesterday's Lesson...

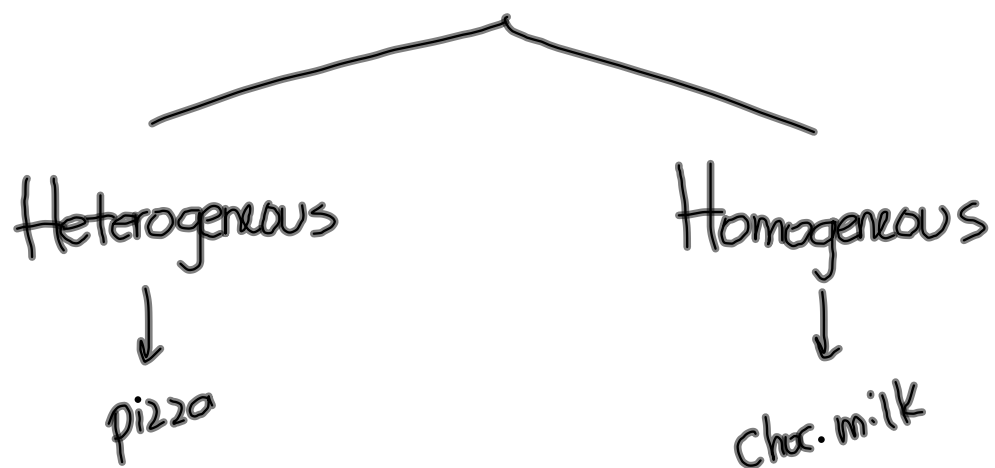


atom - building blocks

molecule - two or more atoms

	element	compound	molecule
CH_4		✓	✓
K	✓		X
O_2	✓		✓
NH_4NO_3		✓	✓

Mixtures



Pure Substance: all the particles are the same
Two types: **Elements** and **Compounds**

Elements: are pure substances that **cannot be broken down** into simpler substances.

Ex. oxygen, hydrogen, iron, and mercury

Compounds: are pure substances that contain **2 or more different elements** in a fixed proportion.

Ex. H₂O, CO₂, etc.

Read p. 172-174




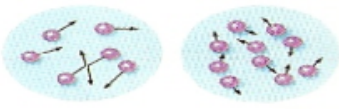

p. 175 #1, 2, 4, 5, 9

Particle Theory

Developed by a philosopher named Democritus who said all substances were made of particles too small to be seen.

- All matter is made of tiny particles.
- All particles of one substance are the same. Different substances are made of different particles.
- The particles are always moving.
- There are attractive forces between the particles.

Table 1 The Particle Theory of Matter

Principle	Illustration
1. All matter is made up of tiny particles.	
2. All particles of one substance are the same. Different substances are made of different particles.	substance A  substance B 
3. The particles are always moving. The more energy the particles have, the faster they move.	 hot cold
4. There are attractive forces between the particles. These forces are stronger when the particles are closer together.	particles far apart—force weak  particles close together—force strong 