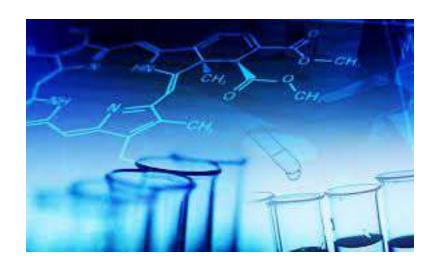
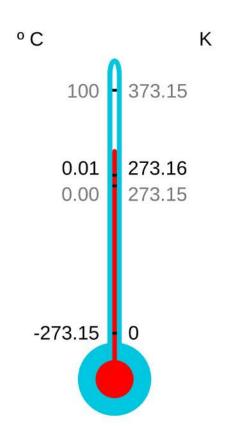
# **Chemistry and Materials**



40 questions

# 1. 絶対零度

- a) terminal zero
- b) final zero
- c) absolute zero



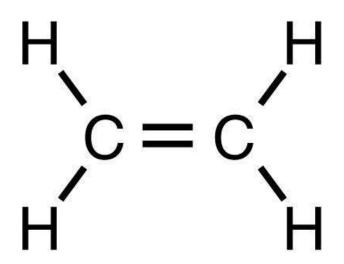
# 2. 希土類元素

- a) rare-earth element
- b) ubundant element
- c) uncommon element



# 3. 二重結合

- a) double bond
- b) twin bond
- c) dual bond



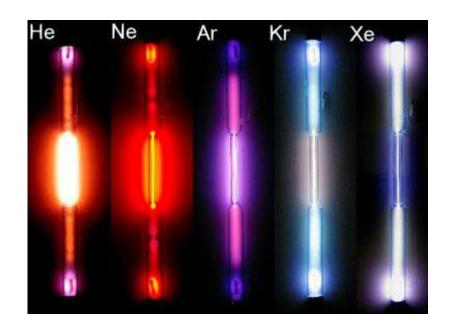
## 4. 滴定

- a) volumetric measurement
- b) drip-concentration
- c) titration



# 5. 第18族元素

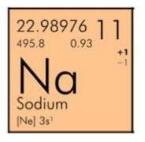
- a) metallic gas
- b) table 18 gas
- c) noble gas

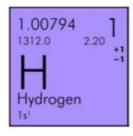


## 6. モル質量

- a) mole weight
- b) mole mass
- c) molar mass

#### NaOH

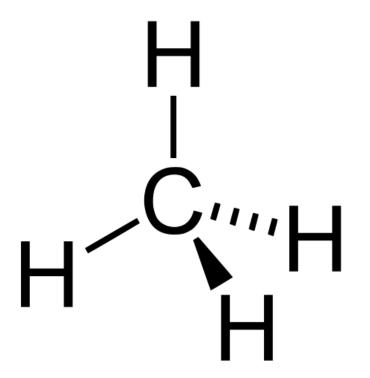






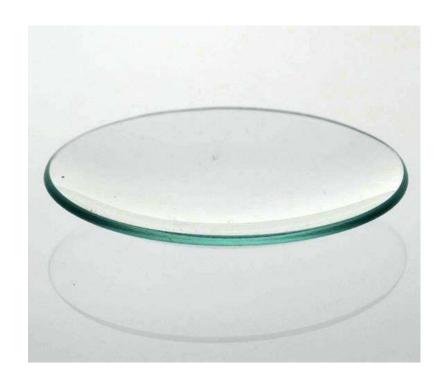
## 7. 有機化合物

- a) organic compound
- b) inorganic compound
- c) carbon compound



# 8. 時計皿

- a) glass plate
- b) watch glass
- c) clock glass



## 9. メスシリンダー

- a) meszz cylinder
- b) linear cylinder
- c) graduated cylinder



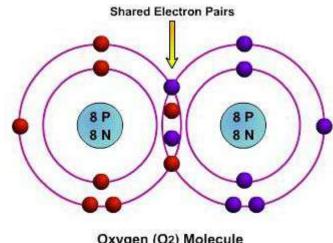
# 10. るつぼ

- a) ceramic cup
- b) heating pot
- c) crucible



## 11. 共有結合

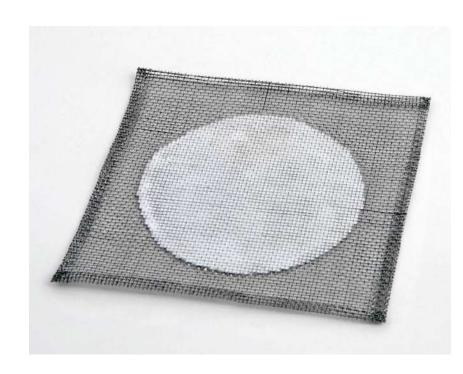
- a) covalent bond
- b) equal bond
- c) uni-polar bond



Oxygen (O2) Molecule

#### **12.**

- a) wire mat
- b) wire gauze
- c) wire pad



# 13. 分光器

- a) microscope
- b) magnetoscope
- c) spectrometer



## 14. 遠心分離機

- a) centrifuge
- b) sample spinner
- c) spin tumbler



### **15.**

- a) pyrex cup
- b) test tube
- c) testing tube



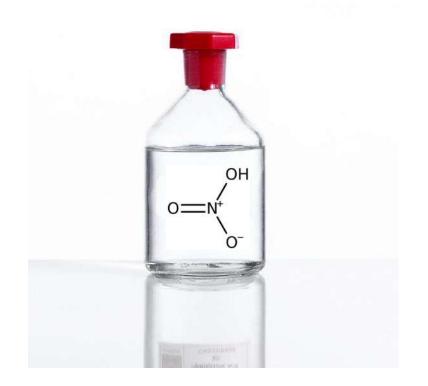
#### **16.**

- a) beaker
- b) conical flask
- c) both are OK



# 17. 硝酸

- a) acetic acid
- b) hydrochloric acid
- c) nitric acid



### 18.

- a) drainware
- b) jerry flask
- c) funnel



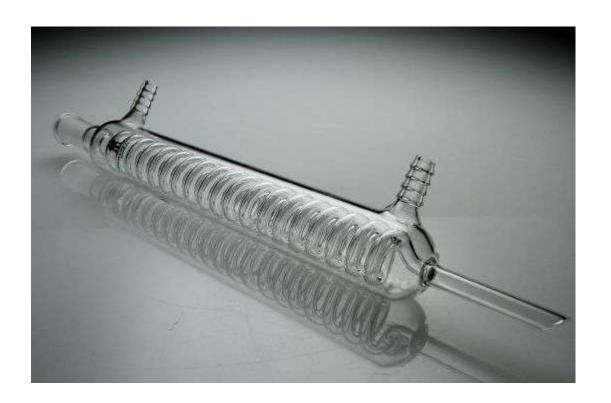
# 19. 塩酸

- a) hydrochloric acid
- b) sulphuric acid
- c) nitric acid



#### 20.

- a) spiral tube
- b) condenser
- c) hydrometer



# 21. 塩基

- a) acid
- b) monomer
- c) base



## 22. 発熱反応

- a) hypothermic reaction
- b) exothermic reaction
- c) endothermic reaction



## 23. 吸熱反応

- a) exothermic reaction
- b) hypothermic reaction
- c) endothermic reaction



# 24. 昇華(しょうか)

- a) sublimation
- b) hypothermia
- c) condensation



# 25. 溶媒 (ようばい)

- a) solute
- b) solution
- c) solvent



# 26. 溶質 (ようしつ)

- a) solvent
- b) solute
- c) solution



# 27. 溶液 (ようえき)

- a) solution
- b) solvent
- c) solute



## 28. 複合材料

- a) layered material
- b) mixed material
- c) composite material



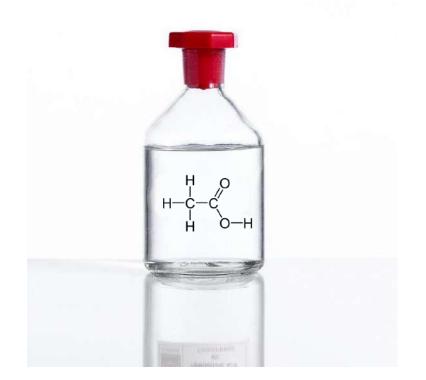
# 29. 重合体

- a) macromer
- b) monomer
- c) polymer



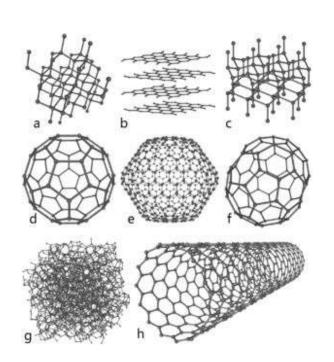
# 30. 酢酸

- a) acetic acid
- b) hydrochloric acid
- c) nitric acid



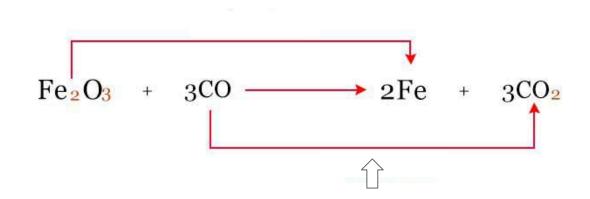
# 31. 同素体(どうそたい)

- a) mellotrope
- b) binotrope
- c) allotrope



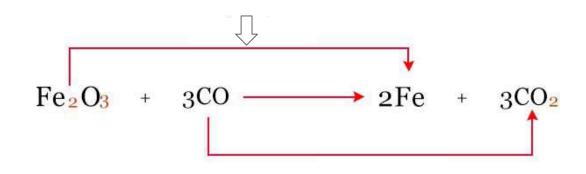
# 32.酸化(さんか)

- a) oxidation
- b) reduction
- c) carbonisation



# 33. 還元(かんげん)

- a) carbonisation
- b) oxidation
- c) reduction



### 34.

- a) lab jacket
- b) lab smock
- c) lab coat



# 35. ドラフトチャンバー

- a) fume hood
- b) air chamber
- c) lab conditioner



## 36. What is this symbol?

- a) radiation
- b) biohazard
- c) poison



## 37. アボガドロ定数

- a) Avogadro's constant
- b) Avogadro's number
- c) Avogadro's ratio



# 38. ケトン (ketone) (発音)

- a) ケトン
- b) ケートーン
- c) キートーン

$$\underset{\mathsf{H_3C}}{\overset{\mathsf{O}}{\swarrow}}_{\mathsf{CH_3}}$$

#### Acetone

Acetoacetate

2-Hydroxybutyric acid

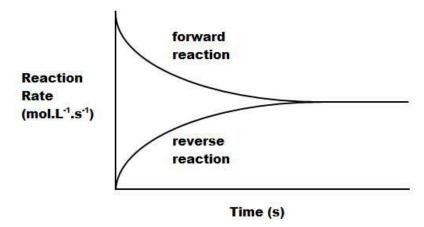
# 39. 安全ピペッター

- a) rubber squeezer
- b) rubber bulb
- c) rubber pump



# 40. 化学平衡

- a) chemical equilibrium
- b) chemical balance
- c) chemical parity



# **Answer the questions here**

