```
2021
                                                                            模拟
                                                                                      11 ~16
                         16
                                                    1 \sim 10
                        2
                                  3
                                            4
                                                     5
                                                               6
                                                                                                      10
              В
                        D
                                  C
                                            \mathsf{C}
                                                     Α
                                                               A
                                                                                                      D
              11
                        12
                                  13
                                           14
                                                     15
                                                               16
                                  C
                                                               D
              D
                        В
                                            В
                                                     D
                                                                  20 \sim 21
                       56
                                    17 \sim 19
( )
                      42
17. (14)
     (1) \mathbb{D}MnO_2 + SO_2 = MnSO_4 (2)
                                                        (1)
     (2) ① 化
                                                          SO<sub>2</sub> (2 )
                     \mathrm{Fe}^{3+}
     (3) (1)^{2} \text{Mn}^{2+} + 2\text{HCO}_{3} = \text{MnCO}_{3} \downarrow + \text{CO}_{2} + \text{H}_{2}\text{O} (2)
                     NH_4HCO_3 (1)
           2
     (4)
                     化 (2 )
     (5) 81.8% ( 81.7%) (2 )
18. (16)
     (1)
                                                                                         ) (1 )
                                                        (2
     (2)
            (1)
     (3) H^{+} (1) +6 (2)
     (4) 2H^{+} + [WO_{3}C_{2}O_{4}H_{2}O]^{2-} \xrightarrow{\triangle} H_{2}WO_{4} \downarrow + H_{2}C_{2}O_{4} (2)
           H_2WO_4 = WO_3 + H_2O (2 )
     (5) H_2C_2O_4 (2)
                       CaSO_4 + H_2C_2O_4 \rightleftharpoons CaC_2O_4 + 2H^+ + SO_4^{2-},
     (6)
           K = \frac{K_{a1}(H_2C_2O_4) \times K_{a2}(H_2C_2O_4) \times K_{sp}(CaSO_4)}{K_{a2}(C_2C_2O_4) \times K_{sp}(CaSO_4)} \approx 1.9 \times 10^{-1} (1)
                                  K_{\rm sp}(\,{\rm CaC_2O_4}\,)
                      化学模拟
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★启用前注意

 $Q_{c} = \frac{c^{2}(H^{+}) \times c(SO_{4}^{2-})}{c(H_{2}C_{2}O_{4})} = \frac{2.0^{2} \times 1.0}{0.5} = 8 > K (1.), \qquad " \qquad ",$   $CaSO_{4} \qquad CaC_{2}O_{4} (1.)$   $(1) \quad +4 \quad (2.)$   $(2) : \text{Ci.: S.: S.} \quad \text{Ci.: } (1.) \qquad 2S_{2}Cl_{2} + 2H_{2}O = 3S \downarrow + SO_{2} \uparrow + 4HCl (2.)$   $(3) \quad \text{OB}, \quad D \quad (2.) \qquad 250 \text{ °C}, \quad B, \quad D \qquad ,$   $(2.) \quad \text{OC} \quad (1.) \quad \text{OC} \quad (2.) \quad \text{OC} \quad (2.) \quad \text{OC} \quad (3.)$ 

3

( ) 2 ( 2