

1	1	2	2	2	3	1	4	3	5	1
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2	6	1	7	1	8	1, 4, 5
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3	9	1, 2, 4	10	2
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4	11	4	12	1	13	4
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5	14	1	15	4	16	2	17	4	18	5
	19	3	20	2	21	3, 4				

6	22	3	23	2	24	1
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7	25	3	26	4	27	2	28	2	29	3
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8	30	2	31	2	32	1	33	2
---	----	---	----	---	----	---	----	---

9	34	2	35	3, 5
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10	36	4	37	4
----	----	---	----	---

11	30	1	31	1	32	2
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12	1	状態変化		2	6.1 g		3	水	600 g		砂糖		200 g	
	4	80 g		5	175 g		6	250 cm ³		5	276 g			
	8	12.5 g/cm ³			水上置換法									
	10	A,B と C			理由	水に溶けやすい気体は水上置換法で集めることができないから。								

13. (1) $57.4 - 50.0 = 7.4 \text{ cm}^3$

(2) ① $\frac{20.0 \text{ g}}{7.4 \text{ cm}^3} = 2.70 \text{ g/cm}^3$

14 (1) A $\frac{4.4 \text{ g}}{2 \text{ cm}^3} = 2.2 \text{ g/cm}^3$

B. $\frac{3.6 \text{ g}}{4 \text{ cm}^3} = 0.9 \text{ g/cm}^3$

17 (1) $300 - 36 = \underline{264 \text{ g}}$

(2) $\frac{36}{300} \times 100 = \underline{12 \%}$

(3) $\frac{36}{300+100} \times 100 = \frac{36}{400} \times 100 = \underline{9 \%}$

(4) $\frac{36}{x} \times 100 = 20$

$300 - 180 = \underline{120 \text{ g}}$

$36 \times 100 = 20x$

$x = \frac{36 \times 100}{20}$

$x = 180 \leftarrow \text{溶液を } 180 \text{ g に薄めよう}$

18. (1) $63.9 \times 2 = \underline{127.8 \text{ g}}$

(2) ① $109.2 \times 5 = 546 \text{ g} \leftarrow 20^\circ\text{C}$
 $546 - 100 = \underline{446 \text{ g}}$
 $\leftarrow 500 \text{ g の水に溶解する量}$

② $13.3 \times 5 = 66.5 \text{ g} \leftarrow 0^\circ\text{C}$
 $546 - 66.5 = \underline{479.5 \text{ g}}$
 $\leftarrow 500 \text{ g の水に溶解する量}$

(3) $\frac{35.8}{100+35.8} \times 100 = 26.3 \dots \underline{26 \%}$

得点

100