

# PHYSICAL SETTING CHEMISTRY

Thursday, August 16, 2018 — 8:30 to 11:30 a.m., only

ANSWER BOOKLET

Student .....

Teacher .....

School ..... Grade .....

**Record your answers for Part B–2 and Part C in this booklet.**

**Part B–2**

**51**

**52** \_\_\_\_\_

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54

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56

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57

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58

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59 \_\_\_\_\_ g

60 \_\_\_\_\_

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\_\_\_\_\_

61 \_\_\_\_\_

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\_\_\_\_\_

62

<b>Key</b>
○ = a molecule of the substance



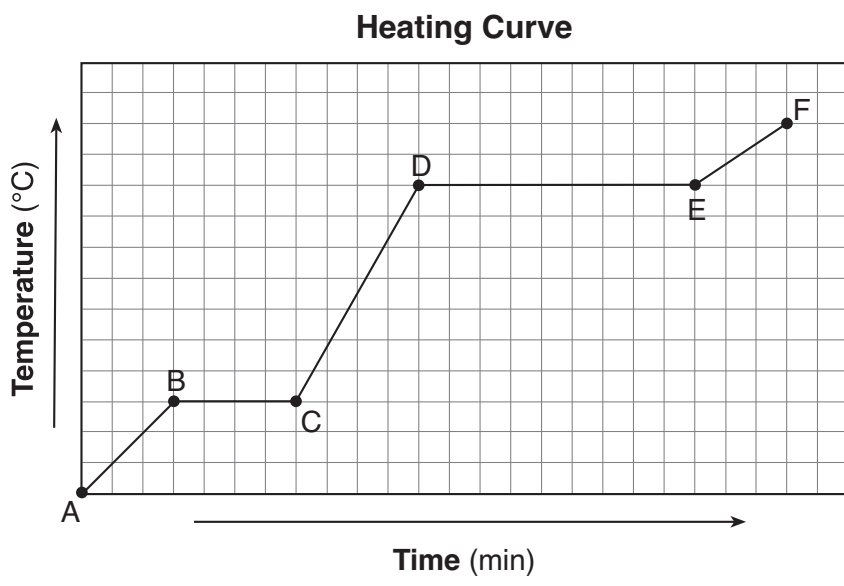
63

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64



65

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**Part C**

**66**

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**67**

**68**

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69

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70 \_\_\_\_\_ %

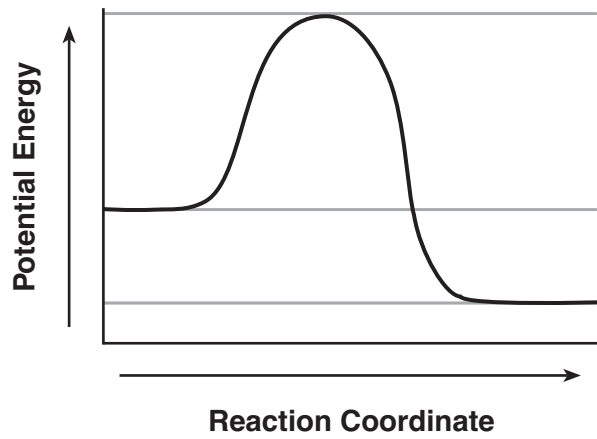
71

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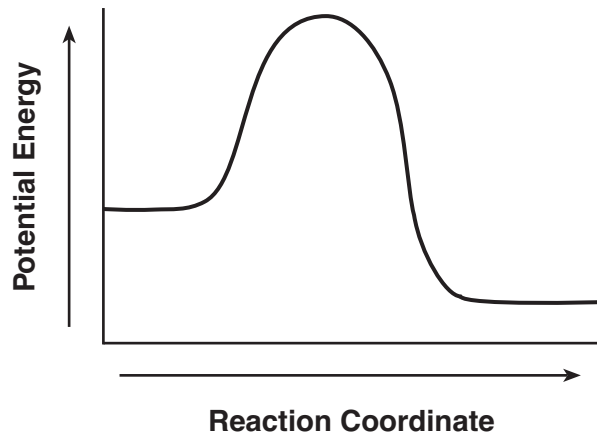
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72



73 \_\_\_\_\_ mol

74



75 \_\_\_\_\_

76 \_\_\_\_\_

77 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

78 \_\_\_\_\_

79  $2\text{NaOH}(\text{aq}) + \text{H}_2\text{SO}_4(\text{aq}) \rightarrow 2\text{H}_2\text{O}(\ell) + \text{\_\_\_\_\_\_}(\text{aq})$ 

80 \_\_\_\_\_ mL

81 \_\_\_\_\_

82 \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

83 Protons: \_\_\_\_\_

Neutrons: \_\_\_\_\_

84  ${}_{32}^{81}\text{Ge} \rightarrow {}_{-1}^0\text{e} + \text{\_\_\_\_\_\_}$ 

85 \_\_\_\_\_ s