Name Period Date

**The Gas Laws – Ch. 14**

1. The gas left in a used aerosol can is at a pressure of 1 atm at 27°C. If this can is thrown into a fire, what is the internal pressure of the gas when its temperature reaches 927°C?

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| given | gas law | work |
|  |  |  |
| formula |
|  |
| **answer:** |

1. A sample of carbon dioxide occupies a volume of 3.50 L at 125 kPa. What pressure would the gas exert if the volume were decreased to 2.00 L?

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| given | gas law | work |
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| formula |
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| **answer:** |

1. A sample of propane occupies 250.0 L at 125 kPa and 38°C. Find its volume at 100.0 kPa and 95°C.

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| given | gas law | work |
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| formula |
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| **answer:** |

1. Oxygen gas is at a temperature of 40°C when it occupies a volume of 2.3 L. To what temperature **in Celsius** should it be raised to occupy a volume of 6.5 dm3?

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| given | gas law | work |
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| formula |
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| **answer:** |

1. Fluorine exerts a pressure of 900. torr. When the pressure is changed to 1.5 atm, its volume is 250. mL. What was the original volume?

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| given | gas law | work |
|  |  |  |
| formula |
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| **answer:** |

1. The volume of a gas is 200.0 mL at 275 K and 92.1 kPa. Find its volume at STP.

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| given | gas law | work |
|  |  |  |
| formula |
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| **answer:** |

1. A sample of N2 occupies a volume of 250 mL at 25°C. What volume will it occupy at 95°C?

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| --- | --- | --- |
| given | gas law | work |
|  |  |  |
| formula |
|  |
| **answer:** |