

Unit 3 Section 1: Molecules in Motion

Module 5

[Unit 3 Textbook Resource Slides](#)

[Unit 3 Summary PDF](#)

| Dates of Completion | OBJECTIVES/TOPICS | LEARNING TARGETS | LEARNING OPPORTUNITIES / RESOURCES Make sure that you pick at Least TWO (2) in this column to explore | PERFORMANCE TASK |
|---------------------------------|---|--|---|---|
| Introduction Material Resources | Weather Phenomena Introduction | I can describe basic components of a weather map and describe the weather patterns in relation to tornadoes. | Phenomena Routine Weather Maps Vocabulary Extra resources: Google Slides from LBC | |
| 10/30 | Obj A: Thermometers and Molecule Motions | I can describe and model how a thermometer works using the kinetic theory. | This objective corresponds with Lesson 52 in your textbook. Video Resource <input type="checkbox"/> How Does A Thermometer Work? Image Resource <input type="checkbox"/> Thermometer Simulation <input type="checkbox"/> Thermometer Model Explained <input type="checkbox"/> Lesson 52 Textbook PDF <input type="checkbox"/> Lesson 52 Textbook Slides Practice Resource <input type="checkbox"/> Thermometer Practice | Due: Obj A Performance Task |
| 10/30 | Obj A1: Kinetic Molecular Theory | I can explain and model the kinetic molecular theory. | This objective corresponds with Lesson 53 in your textbook. Video Resource <input type="checkbox"/> Kinetic Molecular Theory Explained | |

| | | | | |
|-------------|-------------------------------|--|---|--|
| | | | <ul style="list-style-type: none"> <input type="checkbox"/> Absolute Zero <p>Image Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Kelvin Temperature Scale- Why Used? <input type="checkbox"/> Kinetic Molecular Theory <input type="checkbox"/> Kinetic Molecular Theory Simulation <ul style="list-style-type: none"> <input type="checkbox"/> Guided questions <input type="checkbox"/> Lesson 53 Textbook PDF <input type="checkbox"/> Lesson 53 Textbook Slides <p>Practice Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Kinetic Molecular Theory Practice | |
| 10/31, 11/1 | Volume and Temperature | <p>Obj B: Modeling I can create a model that shows the motion of gas particles under changing conditions (pressure, volume, temperature).</p> <p>Obj C: Explanation I can explain the cause and effect of pressure, temperature, and volume on molecules.</p> <p>Obj D: Mathematical Relationship I can calculate the mathematical relationship between pressure, temperature, and volume.</p> | <p>This objective corresponds with Lesson 54 in your textbook.</p> <p>Video Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Volume and Temperature Relationship Explained <input type="checkbox"/> Volume and Temperature Example Calculation <input type="checkbox"/> Volume and Temperature Demo <p>Image Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Modeling and Explaining Relationship of V & T <input type="checkbox"/> V & T Explanation Part 2 <input type="checkbox"/> Mathematical Relationship of V & T <input type="checkbox"/> Mathematical Calculations Relationship V & T <input type="checkbox"/> Lesson 54 Textbook PDF <input type="checkbox"/> Lesson 54 Textbook Slides <p>Practice Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Volume and Temperature: Practice Resources <input type="checkbox"/> Volume and Temperature Simulation | <p>Due: Volume and Temperature Relationship Performance Task</p> |

| | | | | |
|---|--|--|--|--|
| <p>11/4 & 11/ 6</p> <p>11/7- Obj A, A1 and P&V and V&T Quiz</p> | <p>Pressure and Volume</p> | <p>Obj B: Modeling I can create a model that shows the motion of gas particles under changing conditions (pressure, volume, temperature).</p> <p>Obj C: Explanation I can explain the cause and effect of pressure, temperature, and volume on molecules.</p> <p>Obj D: Mathematical Relationship I can calculate the <u>mathematical relationship</u> between pressure, temperature, and volume.</p> | <p>This objective corresponds with Lesson 58 in your textbook.</p> <p>Video Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pressure and Volume Explained. <input type="checkbox"/> Pressure and Volume Example Calculation <input type="checkbox"/> Pressure and Volume Demo <p>Image Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Modeling and Explaining Relationship of P & V <input type="checkbox"/> Mathematical Relationship of P & V <input type="checkbox"/> Mathematical Calculations Relationship of P & V <input type="checkbox"/> P & V simulation <input type="checkbox"/> Lesson 58 Textbook PDF <input type="checkbox"/> Lesson 58 Textbook Slides <p>Practice Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Pressure and Volume practice Resources <input type="checkbox"/> Pressure and Volume Simulation | <p>Due Pressure and Volume Relationship Performance Task</p> |
| <p>11/11 & 11/12</p> <p>11/13 Lab</p> | <p>Temperature and Pressure</p> | <p>Obj B: Modeling I can create a model that shows the motion of gas particles under changing conditions (pressure, volume, temperature).</p> <p>Obj C: Explanation I can explain the cause and effect of pressure, temperature, and volume on molecules.</p> <p>Obj D: Mathematical Relationship I can calculate the <u>mathematical relationship</u></p> | <p>This objective corresponds with Lesson 59 in your textbook.</p> <p>Video Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Temperature and Explaining the Relationship T & P <input type="checkbox"/> Temperature and Pressure Example Calculation <input type="checkbox"/> Can Crush Demo <p>Image Resource</p> <ul style="list-style-type: none"> <input type="checkbox"/> Modeling and Explaining Relationship of T & P <input type="checkbox"/> Mathematical Relationship of T & P | <p>Due: Temperature and Pressure Performance Task</p> |

| | | | | |
|--|--|--|---|--|
| | | between pressure, temperature, and volume. | <input type="checkbox"/> Mathematical Calculations Relationship of T & P <input type="checkbox"/> Lesson 59 Textbook PDF <input type="checkbox"/> Lesson 59 Textbook Slides Practice Resource <input type="checkbox"/> Temperature and Pressure practice Resources <input type="checkbox"/> Temperature and Pressure Simulation | |
| | | UNIT 3 Section 1 ASSESSMENT/PROJECT | | |
| | | Unit 3 Assessment Review 11/14 Assessment 11/15 | | |