

# Ohio Learning Standards Energy Efficiency Programs

| Lesson 1 What is Energy? | Lesson 2 Insulation<br>Weatherization Cooling Heating | Lesson 3 Water Heating | Lesson 4 Lighting | Lesson 5 Appliances and Machines | Lesson 6 What Have we Learned? |
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| <b>4th Grade</b>  |   |   |   |   |   |   |
|---|---|---|---|---|---|---|
| Scientific Inquiry, Application and Scientific Ways of Knowing  | X | X | X | X | X | X |
| Physical Science - Electricity, Heat and Matter   |   |   |   |   |   |   |
| Energy can be transformed from one form to another or can be transferred from one location to another | X | X | X | X | X |   |
| Life Science  |   |   |   |   |   |   |
| Changes in an organisms environment are sometimes beneficial to its survival and sometimes harmful    |   |   |   | X | X |   |
| Mathematics   |   |   |   |   |   |   |
| Measurement and Data - solve problems involving measurement and conversion of measurements            |   | X | X | X | X |   |
| Represent and interpret data  |   | X | X | X |   |   |
| <b>5th Grade</b>  |   |   |   |   |   |   |
| Scientific Inquiry, Application and Scientific Ways of Knowing  | X | X | X | X | X | X |
| Physical Science - Light, Sound and Motion  |   |   |   |   |   |   |
| Light and sound are forms of energy and behave in predictable ways                                    | X |   |   | X | X |   |
| Mathematics   |   |   |   |   |   |   |
| Convert like measurement units within a given measurement system                                      |   |   | X | X | X |   |
| Represent and interpret data  |   | X | X | X |   |   |
| Graph points on a coordinate plane to solve real-world and mathematical problems                      |   |   | X | X |   |   |
| <b>6th Grade</b>  |   |   |   |   |   |   |
| Scientific Inquiry, Application and Scientific Ways of Knowing  | X | X | X | X | X | X |
| Physical Sciences - Matter and Motion   |   |   |   |   |   |   |
| There are two categories of energy: kinetic and potential   | X |   |   |   | X |   |
| <b>7th Grade</b>  |   |   |   |   |   |   |
| Scientific Inquiry, Application and Scientific Ways of Knowing  | X | X | X | X | X | X |
| Physical Science - Conservation of Mass and Energy  |   |   |   |   |   |   |
| Energy can be transformed or transferred but is never lost  | X |   |   | X | X |   |
| Energy can be transferred through a variety of different ways   | X |   |   | X | X |   |
| <b>8th Grade</b>  |   |   |   |   |   |   |
| Scientific Inquiry, Application and Scientific Ways of Knowing  | X | X | X | X | X | X |
| Physical Science - Forces and Motion  |   |   |   |   |   |   |
| There are different types of potential energy   | X |   | X |   |   |   |
| <b>9th - 12th grade</b> Visit <a href="http://www.ohioenergy.org">www.ohioenergy.org</a>              |   |   |   |   |   |   |