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| UNIT TITLE | Unit 1: Elements and Operation of a Laser |

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| TOPIC | Elements and Operation of a Laser |
| DURATION | 5 days |
| DATES |  |

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| ESSENTIAL QUESTION | What characteristics of light set lasers apart from other light sources? |

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| DESIGN QUESTION | | |
| Introducing New Knowledge (DQ2) | Deepening or Practicing (DQ3) | Generating and Testing Hypotheses (DQ4) |

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| STANDARDS |
| 16.07 Demonstrate understanding of the principles of lasers.  16.08 List and describe the operational characteristics of lasers.  16.09 Categorize and explain the operation of lasers. |

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| ASSESSMENT AND MONITORING | |
| Formative | Exit slips, Q&A |
| Summative | Quiz, Lab report |

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| LEARNING GOALS |
| * TSW describe the importance of monochromaticity, directionality, and coherence to lasers. * TSW explain the process of stimulated emission. * TSW |

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| LEARNING TARGETS | | |
| 2.0 Simpler Content | 3.0 Target | 4.0 More Complex |
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| LESSON SEQUENCE / ASSIGNMENTS |
| * Days 1-3: |

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| RESOURCES AND MATERIALS |
| Handouts, lab equipment |

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| ADAPTATIONS FOR UNIQUE STUDENT NEEDS (ELL, SPECIAL ED, GIFTED) |
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| AFTER LESSON – TEACHER REFLECTION |
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