**5th Grade W.I.S.E. Way Target**

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| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations.(5.S.1.2.1)
* Ask, write and analyze questions/testable problems based on observations and research. (5.S.1.6.1)
* Develop a model to describe phenomena (5.S.1.2.3) Ex. Plate tectonics
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb? (5.S.1.6.4,5.S.1.6.5, 5.S.1.6.6)
* Work collaboratively to share and value all ideas.
 | * Research (5.S.1.6.1)
* Create an experimental design that tests one variable at a time and identifies variables, constants and a control.(S.5.1.6.2)
* Identify needed materials and select and use appropriate tools and techniques to gather data. (5.S.1.6.3)
* Measure in both U.S. and International Systems. (5.S.1.3.2)
* Observe, collect and graph data. (5.S.1.6.3)
* Interpret/analyze data. (5.S.1.6.3)
* Choose an effective method to communicate data. (5.S.1.6.3)
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas.
 | * Evidence based explanations and claims. (5.S.1.2.1)
* Be able to explain the difference between observations and inferences in an investigation.(5.S.1.2.2)
* Use models to explain and demonstrate a concept.(5.S.1.2.3) Ex. Diagram a water molecule
* Explain how shape or form are usually related to use or function.(5.S.1.5.1)
* Present info. using proper vocabulary in an articulate manner. (5.S.1.6.7)
* Present data and findings in a professional manner. (5.S.1.6.7)
* Work collaboratively to share and value all ideas.
 | * Relevance and application. What do we do with our new information?(5.S.1.6.4,5.S.1.6.5,5.S.1.6.6)
* Formulate a new and testable problem. ?(5.S.1.6.4,5.S.1.6.5,5.S.1.6.6)
* How can our new knowledge be applied to our community, world or future? ?(5.S.1.6.4,5.S.1.6.5,5.S.1.6.6)
* Compare alternative explanations and predictions. ?(5.S.1.6.4,5.S.1.6.5,5.S.1.6.6)
* Compare and contrast different systems.(5.S.1.1.1)
* Analyze changes that occur in and among systems.(5.S.1.3.1)
* Work collaboratively to share and value all ideas.
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |

**4th Grade W.I.S.E. Way Target**

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| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations.(4.S.1.2.1)
* Ask, write and analyze questions/testable problem based on observations and research.(4.S.1.6.1)
* Develop a model to describe phenomena (4.S.1.2.3, 4.S.1.3.1)
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb? (4.S.1.6.4,4.S.1.6.5,4.S.1.6.6)
* Work collaboratively to share and value all ideas.
 | * Research(4.S.1.6.1)
* Create an experimental design that tests one variable at a time and identifies variables/ constants/controls in an experiment.(4.S.1.6.2)

 (4.S.1.6.1)* Select and use appropriate materials, tools and techniques to gather data.(4.S.1.3.1, 4.S.1.6.3)
* Measure in both U.S. and International Systems.(4.S.1.3.2)
* Observe, collect and graph data.(4.S.1.2.2, 4.S.1.3.2)
* Interpret/analyze data. (4.S.1.2.2, 4.S.1.3.2)
* Choose an effective method to communicate data. (4.S.1.2.2, 4.S.1.3.2)
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas.
 | * Evidence based explanations and claims.(4.S.1.6.7,4.S.1.2.1)
* Be able to explain the difference between observations and inferences in an investigation.
* Use models to explain and demonstrate a concept.(4.S.1.2.3)
* Explain how shape or form are usually related to use or function.(4.S.1.5.1)
* Present info. using proper vocabulary in an articulate manner.(4.S.1.6.7)
* Present data and findings in a professional manner. (4.S.1.6.7)
* Work collaboratively to share and value all ideas.
 | * Relevance and application. What do we do with our new information?(4.S.1.6.5, 4.S.1.6.6)
* Formulate a new and testable problem.(4.S.1.6.5,4.S.1.6.6)
* How can our new knowledge be applied to our community, world or future? (4.S.1.6.5,4.S.1.6.6)
* Compare alternative explanations and predictions. (4.S.1.6.5,4.S.1.6.6)
* Compare and contrast different systems.(4.S.1.1.1)
* Analyze changes that occur in and among systems.(4.S.1.3.1)
* Work collaboratively to share and value all ideas.
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |

**3rd Grade W.I.S.E. Way Target**

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| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations.(3.S.1.6.5)
* Ask, write and analyze questions/testable problem based on observations and research.(3.S.1.2.1)
* Develop a model to describe phenomena.(3.S.1.2.3, 3.S.1.3.1)
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb? (3.S.1.6.4,3.S.1.6.5,3.S.1.6.6))
* Work collaboratively to share and value all ideas.
 | * Research(3.S.1.6.1)
* Create an experimental design that tests one variable at a time and identifies variables/ constants/control. (3.S.1.6.2)
* Select and use appropriate materials, tools and techniques to gather data.3.S.1.6.3)
* Measure in both U.S. and International Systems.(3.S.1.3.2)
* Observe, collect and graph data. (3.S.1.6.3,3.S.1.6.4,3.S.1.6.5)
* Interpret/analyze data. (3.S.1.6.3,3.S.1.6.4,3.S.1.6.5)
* Choose an effective method to communicate data.(3.S.1.6.3)
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas.
 | * Evidence based explanations and claims.(3.S.1.2.1)
* Be able to explain the difference between observations and inferences in an investigation.
* Use models to explain and demonstrate a concept.(3.S.1.2.2)
* Explain how shape or form are usually related to use or function.(3.S.1.5.1)
* Present info. using proper vocabulary in an articulate manner.(3.S.1.6.7)
* Present data and findings in a professional manner. (3.S.1.6.7)
* Work collaboratively to share and value all ideas.
 | * Relevance and application. What do we do with our new information?(3.S.1.6.5, 3.S.1.6.6)
* Formulate a new and testable problem. ?(3.S.1.6.5, 3.S.1.6.6)
* How can our new knowledge be applied to our community, world or future? ?(3.S.1.6.5, 3.S.1.6.6)
* Compare alternative explanations and predictions. ?(3.S.1.6.5, 3.S.1.6.6)
* Compare and contrast different systems.(3.S.1.1.1)
* Measure/analyze changes that occur in and among systems.(3.S.1.3.1)
* Work collaboratively to share and value all ideas.
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |

**2nd Grade W.I.S.E. Way Target**

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| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations. (2.S.1.2.1, 2.S.1.6.2)
* Ask, write and analyze questions/testable problem based on observations and research.
* Develop a model to describe phenomena
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb? (2.S.1.6.3)
* Work collaboratively to share and value all ideas. (2.S.1.7.1)
 | * Research
* Create an experimental design that tests one variable at a time and identifies variables/ constants/controls.
* Select and use appropriate materials, tools and techniques to gather data. (2.S.5.2.1)
* Measure in both standard and non-standard units.(2.S.1.3.1)
* Observe, collect and graph data. (2.S.1.2.1, 2.S.1.6.4)
* Interpret/analyze data. (2.S.1.2.1, 2.S.1.6.4)
* Choose an effective method to communicate data. (2.S.1.2.1, 2.S.1.6.4)
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas. (2.S.1.7.1)
 | * Evidence based explanations and claims. (2.S.1.6.4)
* Be able to explain the difference between observations and inferences in an investigation.
* Use models to explain and demonstrate a concept.
* Explain how shape or form are usually related to use or function. (2.S.1.5.1)
* Present info. using proper vocabulary in an articulate manner.
* Present data and findings in a professional manner.
* Work collaboratively to share and value all ideas. (2.S.1.7.1
 | * Relevance and application. What do we do with our new information?(2.S.1.6.3)
* Formulate a new and testable problem. (2.S.1.6.1)
* How can our new knowledge be applied to our community, world or future? (2.S.1.6.3)
* Compare alternative explanations and predictions.
* Compare and contrast different systems. (2.S.4.1.1., 2.S.5.1.1)
* Analyze changes that occur in and among systems.
* Work collaboratively to share and value all ideas. (2.S.1.7.1
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |

**1st Grade W.I.S.E. Way Target**

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| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations. (1.S.1.2.1)
* Ask, write and analyze questions/testable problems based on observations and research.
* Develop a model to describe phenomena
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb?
* Work collaboratively to share and value all ideas. (1.S.1.7.1)
 | * Research
* Create an experimental design that tests one variable at a time and identifies variables/ constants/controls.
* Select and use appropriate materials, tools and techniques to gather data.
* Measure in both standard and non-standard units.(1.S.1.3.1).
* Observe, collect and graph/use data. (1.S.1.2.1)
* Interpret/analyze data.
* Choose an effective method to communicate data.
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas. (1.S.1.7.1)
 | * Evidence based explanations and claims.(1.S.1.2.1)
* Be able to explain the difference between observations and inferences in an investigation.
* Use models to explain and demonstrate a concept.
* Explain how shape or form are usually related to use or function.
* Present info. using proper vocabulary in an articulate manner.
* Present data and findings in a professional manner.
* Work collaboratively to share and value all ideas. (1.S.1.7.1)
 | * Relevance and application. What do we do with our new information?
* Formulate a new and testable problem.
* How can our new knowledge be applied to our community, world or future?
* Compare alternative explanations and predictions.
* Compare and contrast different systems.
* Analyze changes that occur in and among systems.
* Work collaboratively to share and value all ideas. (1.S.1.7.1)
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |

**K Grade W.I.S.E. Way Target**

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| --- | --- | --- | --- |
| **Wonder** | **Investigate** | **Share** | **Extend** |
| * Make predictions using observations.(K.S.1.2.1, K.S.1.6.1)
* Ask, write and analyze questions based on observations and research.
* Formulate a testable problem.
* Develop a model to describe phenomena
* Apply previous knowledge to new ideas. For example, this works in a car how would it work in a limb?
* Work collaboratively to share and value all ideas. (K.S.1.7.1)
 | * Research
* Create an experimental design that tests one variable at a time.
* Identify variables/ constants/controls.
* Identify needed materials.
* Select and use appropriate tools and techniques to gather data.
* Measure in both standard and non-standard units.
* Observe, collect and graph data. (K.S.1.2.1)
* Interpret/analyze data.
* Choose an effective method to communicate data.
* Understand that failures are opportunities to learn and lead to better solutions.
* Work collaboratively to share and value all ideas. (K.S.1.7.1)
 | * Evidence based explanations and claims.
* Be able to explain the difference between observations and inferences in an investigation.
* Use models to explain and demonstrate a concept.
* Explain how shape or form are usually related to use or function.
* Present info. using proper vocabulary in an articulate manner.
* Present data and findings in a professional manner.
* Work collaboratively to share and value all ideas. (K.S.1.7.1)
 | * Relevance and application. What do we do with our new information?
* Formulate a new and testable problem.
* How can our new knowledge be applied to our community, world or future?
* Compare alternative explanations and predictions.
* Compare and contrast different systems.
* Analyze changes that occur in and among systems.
* Work collaboratively to share and value all ideas. (K.S.1.7.1)
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| **Wonder** | **Investigate** | **Share** | **Extend** |
| Identify and define authentic problems and significant questions for investigation. (NETS-S: Critical Thinking, Problem Solving, & Decision Making-4a) | Use models and simulations to explore complex systems and issues. (NETS-S: Creativity & Innovation-1c)Contribute to project teams to produce original works or solve problems. (NETS-S: Communication & Collaboration-2d)Plan strategies to guide inquiry. (NETS-S: Research & Information Fluency-3a)Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media. (NETS-S: Research & Information Fluency-3b)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b)Troubleshoot systems and applications. (NETS-S: Technology Operations and Concepts-6c) | Create original works as a means of personal or group expression. (NETS-S: Creativity & Innovation-1b)Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media. (NETS-S: Communication & Collaboration-2a)Communicate information and ideas effectively to multiple audiences using a variety of media and formats. (NETS-S: Communication & Collaboration-2b)Develop cultural understanding and global awareness by engaging with learners of other cultures. (NETS-S: Communication & Collaboration-2c)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Understand and use technology systems. (NETS-S: Technology Operations and concepts-6a)Select and use applications effectively and productively. (NETS-S: Technology Operations & Concepts-6b) | Apply existing knowledge to generate new ideas, products, or processes. (NETS –S: Creativity & Innovation-1a)Identify trends and forecast possibilities. (NETS-S: Creativity & Innovation-1d)Exhibit leadership for digital citizenship. (NETS-S: Digital Citizenship-5d)Transfer current knowledge to learning of new technologies. (NETS-S: Technology Operations and Concepts-6d) |