Enduring Skills **Initial** List for **Science**  Kentucky Dept. of Education March 2014

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| **Enduring Skill** | **Reference to Standards** | **What’s Mastery Look Like at your Grade Level?** | **Sources of Evidence:**  **What is available or needs to be developed?** |
| Use scientific thinking to question the natural and designed world. | *Framework for K-12 Science Education,* **Practice 1: Asking Questions & Defining Problems**, pages 54-56.  NGSS Appendix F, pages 4, 17-18 |  |  |
| Use scientific thinking to define problems within the natural and designed world. | *Framework for K-12 Science Education,* **Practice 1: Asking Questions & Defining Problems**, pages 54-56.  NGSS Appendix F, pages 4, 17-18 |  |  |
| Develop and refine models to explain, predict, and investigate the natural and designed world. | *Framework for K-12 Science Education,* **Practice 2: Developing and Using Models**, pages 56-59.  NGSS Appendix F, pages 19-20 |  |  |
| Use models to explain, predict, and investigate the natural and designed world, including identifying the limitations of the models. | *Framework for K-12 Science Education,* **Practice 2: Developing and Using Models**, pages 56-59.  NGSS Appendix F, pages 19-20 |  |  |
| Plan and carry out investigations. | *Framework for K-12 Science Education,* **Practice 3: Planning and Carrying Out Investigations**, pages 59-61.  NGSS Appendix F, page7, 21 |  |  |
| Organize and use data to support claims or conclusions. | *Framework for K-12 Science Education*, **Practice 4: Analyzing and Interpreting Data**, pages 61-63  NGSS Appendix F, pages 9, 23-24 |  |  |
| Analyze data to make sense of phenomena or determine an optimal design solution. | *Framework for K-12 Science Education*,  **Practice 4: Analyzing and Interpreting Data**, pages 61-63  NGSS Appendix F, pages 9, 23-24 |  |  |
| Construct explanations based on scientific evidence. | *Framework for K-12 Science Education*,  **Practice 6: Constructing Explanations and Designing Solutions,** pages 67-71  NGSS Appendix F**,**  pages 11-12, 27-28 |  |  |
| Design and refine solutions to problems. | *Framework for K-12 Science Education*,  **Practice 6: Constructing Explanations and Designing Solutions,** pages 67-71  NGSS Appendix F, pages 11-12, 27-28 | . |  |
| Argue using scientific evidence. | *Framework for K-12 Science Education*,  **Practice 7: Engaging in Argument from Evidence,** pages 71-74  NGSS Appendix F, , pages 13-14, 29-30 |  |  |
| Use evidence to evaluate claims. | *Framework for K-12 Science Education*,  **Practice 7: Engaging in Argument from Evidence,** pages 71-74  NGSS Appendix F, pages 13-14, 29-30 |  |  |
| Obtain information to determine patterns in and/or evidence about the natural or designed world. | *Framework for K-12 Science Education*, **Practice 8: Obtaining, Evaluation, and Communicating Information**, pages 74-77.  NGSS Appendix F, pages 31-32. |  |  |
| Evaluate information to determine usefulness and value. | *Framework for K-12 Science Education*, **Practice 8: Obtaining, Evaluation, and Communicating Information**, pages 74-77.  NGSS Appendix F, pages 31-32. |  |  |
| Communicate information in a variety of developmentally appropriate formats. | *Framework for K-12 Science Education*, **Practice 8: Obtaining, Evaluation, and Communicating Information**, pages 74-77.  NGSS Appendix F, pages 31-32. |  |  |
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