**SCIENCE COURSE SYLLABUS**

**7TH GRADE**

**MRS. D. MOORE**

This year, we will continue to participate in the Alabama Mathematics, Science, and Technology Initiative (AMSTI) lessons. This is an inquiry-based approach to learning: The science class will be filled with loads of activities! We are excited about this program as we hope to boost interest and raise our test scores!

**1st Semester: Organisms- From Macro to Micro**

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| **Lesson** | **Lesson Title** |
| 1 | **What Are Organisms?** |
| **2** | **The WOWbug: A Closer Look** |
| **3** | **Investigating Lumbriculus** |
| **4** | **Creating Your Own Pond** |
| **5** | **Wisconsin Fast Plants** |
| **6** | **Cabbage White: From Egg to Butterfly** |
| **7** | **Exploring Cells** |
| **8** | **Cell Division** |
| **9** | **Sexual Reproduction in Flowering Plants** |
| **10** | **Leaf Structure and Transpiration** |
| **11** | **Exploring Microorganisms** |
| **12** | **Revisiting Your Pond** |
| **13** | **Anchor Activity/project** |
| **14** | **Investigating Fungi: Molds** |
| **15** | **Investigating Fungi: Yeast** |
| **16** | **Introducing Daphnia** |
| **17** | **Exploring the Hydra** |

**2nd Semester**

**Genetics and Biotechnology**

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| **Lesson** | **Lesson Title** |
| **1** | **Meet the Millers** |
| **2** | **What is DNA?** |
| **3** | **How was DNA Discovered?** |
| **4** | **What are the Building Blocks of DNA?** |
| **5** | **What is RNA?** |
| **6** | **How does DNA Code for Traits?** |
| **7** | **What is Biotechnology?** |

**Human Body Systems**

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| **1** | **Human Body Systems: A Pre-Assessment** |
| **2** | **Moving Through the Digestive Tract** |
| **3** | **Exploring Carbohydrates** |
| **4** | **Digestion in the Mouth** |
| **5** | **Digestion in the Stomach** |
| **6** | **Diffusion and Active Transport** |
| **7** | **Surface Area and Absorption** |
| **8** | **The Digestive System: An Assessment** |
| **10** | **Assessing Breathing Models** |
| **11** | **How Much Air Can You Exhale?** |
| **12** | **Recipe for Energy: Cellular Respiration** |
| **13** | **Releasing Energy From Food** |
| **14** | **The Pumping Heart** |
| **15** | **Factors Affecting Heart Rate** |
| **16** | **The Heart Meets Resistance** |
| **17** | **The Respiratory and Circulatory Systems: An Assessment** |
| **18** | **The Musculoskeletal System: An Overview** |
| **19** | **Joints and Movement** |
| **20** | **Muscle Size and Strength** |
| **21** | **Exploring Muscle Fatigue** |
| **22** | **The Body in Balance** |
| **23** | **Final Assessment: Human Body Systems** |