

## **Values and Vision**

### **Academic Excellence**

*We will set high expectations and use effective instructional strategies to meet the needs of all learners.*

### **Exploration and Relevance**

*We will construct real-world opportunities for children to make discoveries on their own, integrating science, technology, engineering, and math into the other curricular areas.*

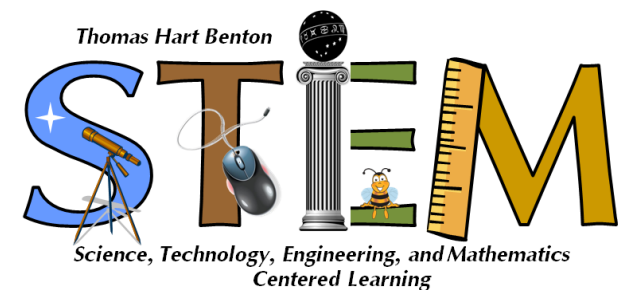
### **Character**

*We will build a positive environment and empower children to become people of integrity, compassion, and empathy.*

### **Partnerships**

*We will develop partnerships and promote opportunities for family and community involvement in our building.*

*"STEM is designed for students who enjoy challenges and investigating the world around them."*



**Benton Elementary  
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*Learning through  
Discovery*

*Leading with  
Character*

# SCIENCE

With the release of the Science Missouri Learning Standards, we have aligned our curriculum to ensure we provide students with authentic science learning experiences where they can begin to develop science and engineering practices. Our teachers have developed units of study around the standards that provide hands-on learning opportunities and connect to real-world experiences.

We also have developed many learning spaces to create an ideal learning environment for the study of science and engineering. These spaces include our STEM lab, nature play area, outdoor classroom, green houses, raised bed gardens, and composting area.

# TECHNOLOGY

At Benton, we believe technology is a tool that is used to enhance student learning and solve problems. Therefore, each classroom space has an interactive ClearTouch® board and a document camera. All our classrooms are 1:1 with student iPads. The building has a computer lab, digital microscopes, time-lapse cameras, and many other technological tools that enhance student learning.

# ENGINEERING

We currently implement the Project Lead the Way Launch engineering curriculum. Students explore various science and engineering concepts by participating in hands-on design challenges. As part of this program, students in 3<sup>rd</sup> & 4<sup>th</sup> grade work with VEX robotics construction kits to design simple machines, cars, and generators.



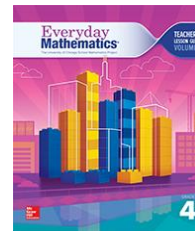
To find out more information about Project Lead the Way Launch go to [www.pltw.org](http://www.pltw.org).

We also try to incorporate engineering tasks and challenges in other ways outside of the PLTW curriculum. Each grade level has three engineering challenges that are part of the culminating experience for their science units. These include projects like designing roofs to withstand strong winds, designing devices to communicate over a distance with light and sound, and developing a clean-up system for an oil spill.

*Throughout the school year, Benton partners with local businesses and organizations to expose students to STEM related careers and professions. Our fall STEM Showcase allows community members to share STEM interests with our students.*

# MATH

Benton uses a range of instructional tools to help students develop strong math skills. All our classrooms teach math using the Everyday Mathematics curriculum. This program provides students opportunities to learn skills through repeated practice and application of skills. The goal is for students to begin to be flexible in their thinking about numbers. Students also develop their math skills using ST Math, a computer-based program that teaches concepts through visual-spatial reasoning. Both the ST Math and Everyday Mathematics programs have online games students can play at home to reinforce concepts they are learning in their classroom.



# LITERACY

At Benton, we know that the foundation upon which all learning rests is literacy. Without proficient reading and writing skills, students are unable to be successful in the STEM areas of study. While you may not find an "L" in STEM, it is integrated across content areas and taught in all our classrooms at Benton!

As a Title I school, we can offer all students additional supports in the area of literacy, such as one-on-one or small group instruction, to ensure that they are reading and writing on grade level. We have an abundant supply of fiction and nonfiction texts in our leveled book room. Benton also implements an RtI (Response to Intervention) model which includes research-based interventions such as Reading Recovery®.

We have been fortunate enough to receive grant funding from the Laura Bush Foundation to purchase additional books which support STEM centered learning for our school library.

Our primary classrooms (K-2) use Foundations© to teach foundational reading skills. All classroom teachers use Benchmark Advanced© integrated literacy program to teach reading and writing. This program, along with our other STEM experiences, support literacy development by providing students with authentic opportunities to read and write during all content areas. This integration teaches students reading and writing are tools they can use to learn science, mathematics, and other content. Teachers use nonfiction texts frequently to connect content knowledge to reading instruction. Our students frequently use science and math journals to apply their newly learned writing skills as they share their thinking and process for learning math and science.

