JAMES M. BROWN ELEMENTARY SCHOOL STEM Action Plan

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1. Big Idea:
   • To start an After School STEM (METS) Club for 3rd, 4th, and 5th grade to provide students with engaging experiences to develop a lifelong desire of learning in the areas of science, technology, engineering, and math.

2. Goals:
   • Improve test scores for AYP by:
     1. Improve problem solving skills
     2. Improve higher order thinking skills
   • To introduce the STEM learning model.
   • Working in cooperative groups.
     1. Improve school community
     2. Improve the environment
   • Integrate reading and writing skills.

3. Timeline:
   • Ten students from each grade level will be involved per semester.
   • Semester timeline: 18 total weeks
     - 3 weeks: Design Process and briefs
     - 12 weeks: Lessons and discovery
     - 3 weeks: Final project and presentation

4. Assessments:
   • Students will use notes, journals, diagrams, sketches, and graphs. Rubrics will be provided for each STEM activity. Students will also present their final project to parents and administration.

5. Resources
   • Veteran Teachers
   • Local Hardware Stores
   • Local Businesses
   • PTO
   • District Office
   • Coaches
   • Parents

6. Learning Experiences:
   • Include Children’s Engineering Lessons and Engineering Design Process in curriculum.

7. Examples:
• Students will work together in groups to develop their own plan for new playground equipment. They will make a model of their plan using play dough and other materials. They will present their idea to parents and the community at METS night.