



# LEARNING STANDARDS MET THROUGH THE INVENTION CONVENTION PROGRAM

## Science K-4:

- \* Observe and ask questions about the natural environment
- \* Plan and conduct simple investigations
- \* Employ simple equipment and tools to gather data and extend for senses
- \* Use appropriate mathematics with data to construct reasonable explanations
- \* Communicate about observations, investigations and explanations, and,
- \* Review and ask questions about the observations and explanation of others

## Science K-8:

- \* Identify questions that can be answered through scientific investigation
- \* Analyze and interpret data
- \* Develop descriptions, models, explanations and predictions
- \* Think critically and logically to connect evidence and explanations
- \* Recognize and analyze alternative explanations and predictions
- \* Communicate scientific procedures and explanations

## Mathematical Practices :

- \* Make sense of problems and persevere in solving them
- \* Construct viable arguments and critique the reasoning of others
- \* Use appropriate tools strategically
- \* Look for and make use of structure
- \* Look for and express regularity in repeated reasoning

## Language Arts - Writing:

- \* Writers share information, opinions and ideas through multiple ways such as drawing, dictating and writing to inform/explain/describe some information about a topic.
- \* Effective writing is the result of multi-stage, reflective process in which the writer must develop, plan, revise, edit and rewrite their work to evoke change or clarify their ideas. The stage of these processes are enhanced with collaboration and new technology.
- \* Writing is a tool used to communicate critical thinking and problem solving.
- \* Reading comprehension
- \* Age appropriate text complexity (qualitative/quantitative/reader and task)

## Language Arts - Listening and Speaking:

- \* Strong listening and speaking skills are critical for learning and communicating and allowing us to understand our world better. Applying these skills to collaboration amplifies an individuals contribution and leads to new and unique understandings and solutions.
- \* Proficient speakers make deliberate choices regarding language, content, and media to capture and maintain the audience in order to convey their message.
- \* Effective written and oral communication rely upon understanding and applying the rules of standard English.
- \* Success in the post secondary setting as well as the workplace requires effective communication.