Standards Aligned SystemPennsylvania Department of Education

**Look for and make use of structure.**

\*Look for patterns. For instance, they adopt mental math strategies based on patterns (making ten, fact families, doubles).

**Attend to precision.**

\*Develop their mathematical communication skills.

\*Use clear and precise language in their discussions with others and when they explain their own reasoning.

**Use appropriate tools**

**strategically.**

\*Consider the available tools (including estimation) when solving a mathematical problem.

\*Decide when certain tools might be better suited.

\*Decide to solve a problem by drawing a picture rather than writing an equation.

**Model with Mathematics.**

\*Experiment with representing problem situations in multiple ways including numbers, words (mathematical language), drawing pictures, using objects, acting out, making a chart or list, creating equations, etc.

\*Connect the different representations and explain the connections.

\*Use all of these representations as needed.

**Look for and express**

**regularity in repeated**

**reasoning**.

\*Look for patterns. For instance, they adopt mental math strategies based on patterns (making ten, fact families, doubles).

**Construct viable**

**arguments**

**and critique the reasoning of others.**

\*Construct arguments using concrete referents, such as objects, pictures, drawings, and actions.

\*Practice their mathematical communication skills as they participate in mathematical discussions involving questions like, “How did you get that?” “Explain your thinking,” and “Why is that true?”

\*Explain their own thinking, but listen to others’ explanations.

\*Decide if the explanations make sense and ask appropriate questions.

**Grade 2**

**Grade Level Emphasis**

**PA Core Standards**

**Standards for Mathematical Practice**

***Tool Developed by***

**Central Intermediate Unit # 10**

**345 Link Road**

**West Decatur, PA 16878**

**(814) 342-0884**

**Reason abstractly and quantitatively.**

\*Recognize that a number represents a specific quantity.

\*Connect the quantity to written symbols.

\*Create a representation of a problem while attending to the meanings of the quantities (quantitative reasoning).

\*Begin to know and use different properties of operations and objects.

**Make sense of problems**

**and persevere in solving them.**

\*Realize that doing mathematics involves solving problems and discussing how they solved them.

\*Explain to themselves the meaning of a problem and look for ways to solve it.

\*Use concrete objects or pictures to help them conceptualize and solve problems.

\*Check their thinking by asking themselves, “Does this make sense?”

\*Make conjectures about the solution and

plan out a problem solving approach.

**MP 2**

**MP 8**

**MP 3**

**MP 1**

**MP 7**

**MP 5**

**MP 6**

**MP 4**