

The Standards for Mathematical Practice describe ways students engage with the mathematical content as they progress from kindergarten through grade twelve. Components of literacy permeate these standards. Literacy is integrated with the learning of the mathematics as teachers connect the practices with the content standards.

Mathematical Literacy

READING: Successful readers make meaning of and from symbols, letters, words, pictures, diagrams, and models. Reading literacies are clearly identified within the Standards for Mathematical Practice.

Comprehension

- Predict (1, 3, 5)
- Draw conclusions (3, 4, 7, 8)
- Use of context clues (3, 4)
- Summarize (7)
- Judge text critically (3)
- Use models, charts, graphs, diagrams, and symbols to interpret information (1, 4)
- Gather, evaluate, and synthesize data (1, 2, 3)

Vocabulary

- Utilize context clues (1, 3, 6)
- Use content vocabulary (6)
- Decode and encode symbolic meaning (6)

WRITING: Learners apply writing skills and strategies effectively for different purposes. The application of written communication is embedded within the Standards for Mathematical Practice to develop students' mathematical proficiency.

Writing

- Compare and contrast (3, 5)
- Create an effective response to answer a problem (1, 3)
- Use appropriate tools to explore and deepen understanding (1, 5)
- Use appropriate symbols to illustrate concepts (1, 4)
- Analyze models, charts, graphs, diagrams, and symbols to enhance communication (1, 2, 3, 4)
- Develop, evaluate, and revise as necessary an effective plan to solve a complex problem (1, 2, 4)

SPEAKING AND LISTENING: Students will apply listening, speaking, and media literacy skills and strategies to communicate with a variety of audiences and for different purposes. The Standards for Mathematical Practice emphasize the importance of speaking and listening in the development of mathematical fluency.

Communication

- Listen actively, understand, evaluate, and respond to an oral communication (3, 6)
- Plan, create, organize, and present a product demonstrating understanding (3, 4)
- Communicate fluently with various technology tools (5)
- Develop appropriate self-questioning techniques (1, 3, 4, 8)

Numbers following the bulleted items above indicate the Standard for Mathematical Practice in which the strategy appears.