

Academic Language Functions

Academic Language Functions are used daily in all academic subjects. The language functions go well beyond just learning the content vocabulary. *A Focused Approach to Constructing Meaning* by Dutro & Levy explains further these functions and how best to support students.

In mathematics we introduce many new content vocabulary terms, along with these terms, mathematics students will also be called upon to understand the mathematics and to describe, explain, and defend their solutions.

| Common Language Functions | |
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| Function | Sentence Starter |
| <p>Elaboration and Description Explaining attributes and properties, making sense of problems</p> | <p><i>This has</i> <i>These have</i> <i>Tend to</i> <i>Adjacent to</i></p> |
| <p>Compare/Contrast Explaining similarities and differences</p> | <p><i>Are the same/different because</i> <i>Both have</i> <i>Have in common</i></p> |
| <p>Proposition and Support Defend and explain a solution, constructing viable arguments</p> | <p><i>I think/believe</i> <i>My (his, her) idea</i> <i>In support of</i></p> |
| <p>Sequence Steps to take to solve a problem</p> | <p><i>First, second</i> <i>Next, lastly</i> <i>Before, after</i></p> |
| <p>Summarize Express structure and regularity in reasoning</p> | <p><i>My solution is reasonable in that</i> <i>I noticed that</i> <i>This occurs here too</i></p> |

Academic Language Functions and Illustrative Mathematics Tasks

The **Illustrative Mathematics Tasks** require the use of these academic functions. By providing these sentence starters, students can begin to explain the solutions to the problems.

| Grade | Illustrative Mathematics Task | Language Function |
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| K | Christina's Candies | Proposition and Support, and Elaboration and Description Students describe the total number of candies, understanding the part-part-whole concept and demonstrate their thinking. |
| 1 | Boys and Girls, Variation 2 | Elaboration and Description Students explain the part-part-whole relationship. |
| 2 | Red and Blue Tiles | Elaboration and Description Students explain each of their answers. |
| 3 | Gifts from Grandma, Variation 1 | Sequencing Students use sequencing language to solve the problems. They may ask themselves, <i>What did I start with? What do I do next?</i> |
| 4 | Comparing Growth, Variation 1 | Compare and Contrast Students will have the opportunity to compare and contrast two possible solutions. |
| 5 | Video Game Scores | Sequencing, and Elaboration and Description Students describe a sequence of events. |
| 6 | Distance to School | Elaborate and Describe, and Summarize Students contrast rainy days and rain free days rainy days. Students will describe their thinking and summarize their solution. |
| 7 | Writing Expressions | Sequencing Students describe a sequence of events. |
| 8 | The Sign of Solutions | Compare and Contrast, and Summarizing Students examine the structure and operations that make up an equation. |