

Learning Area	Types of Tasks that Students Need to Carry Out in Learning Mathematics*	Student Difficulties <i>What others would you add to the list?</i>
Conceptual	<ul style="list-style-type: none"> • Moving from concrete to abstract • Making generalizations • Determining rules • Identifying and extending patterns 	<input type="checkbox"/> Thinks concretely and has difficulty generalizing <input type="checkbox"/>
Language	<ul style="list-style-type: none"> • Reading text • Writing explanations • Understanding and using math vocabulary • Participating in class discussions 	<input type="checkbox"/> Difficulty understanding written directions <input type="checkbox"/>
Visual-Spatial	<ul style="list-style-type: none"> • Aligning numbers • Interpreting and making graphs • Working with 2-D and 3-D representations • Copying from board and book 	<input type="checkbox"/> Difficulty interpreting coordinate graphs <input type="checkbox"/>
Organization	<ul style="list-style-type: none"> • Collecting and recording data • Sequencing and carrying out procedures in a multi-step problem • Finding information in prior student work • Completing long-term assignments or projects 	<input type="checkbox"/> Disorganized approach to problems leads to errors <input type="checkbox"/>
Memory	<ul style="list-style-type: none"> • Recalling previously learned information from long term memory, such as retrieving math facts • Keeping pieces of information in one's head (working memory) to solve multi-step problems • Remembering the sequence of steps in a mathematical procedure 	<input type="checkbox"/> Makes frequent errors when retrieving information <input type="checkbox"/>
Attention	<ul style="list-style-type: none"> • Sustaining the attention needed to carry out multi-step investigations • Focusing on the details in math problems • Attending to other students' explanations • Sitting for extended periods 	<input type="checkbox"/> Speeds through tasks and makes many careless errors <input type="checkbox"/>
Other	<ul style="list-style-type: none"> • Using fine motor skills for making tables, graphs, diagrams, etc. • Using social skills for working cooperatively with classmates in pairs or groups • Working independently and moving through a frustration point 	<input type="checkbox"/> Works very slowly and with difficulty on tasks that involve fine motor skills. <input type="checkbox"/>

*This list is based on analysis of tasks in several middle school mathematics curricula and research on the math difficulties of students with disabilities. The table provides some examples and is not meant to be a comprehensive list.