



# NCTM Process Standards Rubric



## Geometry – PK-2

Skills For Critical Thinking		Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5
GOAL 1: Problem Solving	<ul style="list-style-type: none"> <li>• build new mathematical knowledge through problem solving;</li> <li>• solve problems that arise in mathematics and in other contexts;</li> <li>• apply and adapt a variety of appropriate strategies to solve problems;</li> <li>• monitor and reflect on the process of mathematical problem solving.</li> </ul>	✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓
GOAL 2: Reasoning & Proof	<ul style="list-style-type: none"> <li>• recognize reasoning and proof as fundamental aspects of mathematics;</li> <li>• make and investigate mathematical conjectures;</li> <li>• develop and evaluate mathematical arguments and proofs;</li> <li>• select and use various types of reasoning and methods of proof.</li> </ul>	✓ ✓	✓	✓ ✓	✓ ✓ ✓	✓ ✓
GOAL 3: Communication	<ul style="list-style-type: none"> <li>• organize and consolidate their mathematical thinking through communication;</li> <li>• communicate their mathematical thinking coherently and clearly to peers, teachers, and others;</li> <li>• analyze and evaluate the mathematical thinking and strategies of others;</li> <li>• use the language of mathematics to express mathematical ideas precisely.</li> </ul>	✓ ✓ ✓ ✓	✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓
GOAL 4: Connections	<ul style="list-style-type: none"> <li>• recognize and use connections among mathematical ideas;</li> <li>• understand how mathematical ideas interconnect and build on one another to produce a coherent whole;</li> <li>• recognize and apply mathematics in contexts outside of mathematics.</li> </ul>	✓	✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓
GOAL 5: Representation	<ul style="list-style-type: none"> <li>• create and use representations to organize, record, and communicate mathematical ideas;</li> <li>• select, apply, and translate among mathematical representations to solve problems;</li> <li>• use representations to model and interpret physical, social, and mathematical phenomena.</li> </ul>	✓	✓ ✓ ✓	✓ ✓	✓ ✓ ✓	✓ ✓