






# MASTER SCIENTIST

## Student Badges

<p><b>MASTER OBSERVER</b></p> <ul style="list-style-type: none"> <li>• Curious: looks at everything</li> <li>• Studies the <i>details</i></li> <li>• Keeps records</li> </ul>	 <p>Examine the whole situation, and look carefully at the <i>details</i> too. Make notes, lists, charts, and sketches or take pictures so you can check the facts again later.</p>
<p><b>MASTER EXPLAINER</b></p> <ul style="list-style-type: none"> <li>• Inspired guesses</li> <li>• Makes <i>reasonable</i> claims</li> <li>• Draws conclusions from <i>evidence</i></li> </ul>	 <p>Go ahead. Make a guess, then ask, “Is that <i>reasonable</i>?” “Does that fit what I know or saw?” Try to match your conclusions with what actually happened – <i>the evidence</i>.</p>
<p><b>MASTER INVESTIGATOR</b></p> <ul style="list-style-type: none"> <li>• Creative, Playful Explorer</li> <li>• Fair Tester</li> <li>• Quality Controller</li> </ul>	 <p>Explore <i>creatively and playfully</i>. Do quick <i>tests and comparisons</i>. Change one thing and keep everything else the same. Always watch the results carefully.</p>
<p><b>MASTER QUESTIONER</b></p> <ul style="list-style-type: none"> <li>• Asks for Information</li> <li>• Follows the Trail</li> <li>• Speculates from Evidence</li> </ul>	 <p>Ask for information if you need it. Then <i>follow the trail</i>. Base each question on something you already know or suspect. Look for rules or patterns based on what you observed.</p>
<p><b>MASTER PROBLEM SOLVER</b></p> <ul style="list-style-type: none"> <li>• Gets Started, Takes Risks</li> <li>• Gets Help as Needed</li> <li>• Pays Attention to Results</li> </ul>	 <p>Take a risk and try <i>something</i>! If that doesn't work, <i>try something else</i>. Ask for help when you need it and pay attention to what works and what doesn't (for you and other people).</p>

These badges are printed on ~ 3½ x 2 inch card stock. An additional card is printed back and front with a 2 x 3 grid. Students place a mark or sticker in one section of the grid upon completion of each NPASS science or engineering project. The cards can be hole-punched in the upper left corner and joined with a 1½-inch metal ring. The set can be attached to clothing with an alligator clip or held by a lanyard.

**DRAFT: Not for Distribution**