

# Explain it	<ol style="list-style-type: none"> <li>1. Explain their processes in solving a problem one way.</li> <li>2. Explain their thought processes in solving a problem and representing it in several ways.</li> <li>3. Discuss, explain and demonstrate solving a problem with multiple representations and in multiple ways.</li> </ol>	<p>What do you think about what ____ said?</p> <p>Do you agree? Why not?</p> <p>Does anyone have the same answer but a different way to explain it?</p> <p>What did other members of your group try?</p> <p>How would you describe the problem in your own words?</p> <p>What do you know that is not stated in the problem?</p> <p>How do you tackle similar problems?</p> <p>Could you try it with different numbers?</p>
# Prove it	<ol style="list-style-type: none"> <li>1. Prove their thinking for the solution they have found.</li> <li>2. Prove their thinking with accurate vocabulary.</li> <li>3. Justify, with accurate language and vocabulary why their solution is correct.</li> </ol>	<p>How did you reach that conclusion?</p> <p>How might you justify your thinking – in words?</p> <p>Convince someone you are right through explaining your reasoning.</p> <p>Can you refine your argument by explaining in a different way?</p>
# Draw it	<ol style="list-style-type: none"> <li>1. Reason with models or pictorial representations to solve problems.</li> <li>2. Are able to translate situations into symbols for solving problems.</li> <li>3. Convert situations into symbols to appropriately solve problems as well as convert symbols into meaningful situations.</li> </ol>	<p>How could you use a diagram to further your understanding?</p> <p>Can you illustrate your thinking by drawing a picture?</p> <p>Could you use a bar model to deepen your understanding?</p> <p>Would it be possible to use another drawing / representation to solve the question?</p>
# Story it	<ol style="list-style-type: none"> <li>1. Translate numbers within puzzle to a 'real life' story verbally.</li> <li>2. Devise a meaningful 'real life' maths story to use alongside a number sentence.</li> </ol>	<p>Can you explain your 'real life' story and how the numbers within the number sentence relate to a partner?</p> <p>How might you represent your 'real life' maths story in words?</p> <p>Can you devise a similar 'real life' maths story to challenge a partner with?</p>

## Maths Stem Questions