Assessment through Curricular Competencies: Questions to Prompt

Reasoning and Analyzing

- Estimate reasonably
- Develop mental math strategies and abilities to make sense of quantities
- Use reasoning and logic to explore and make connections
- How did you estimate..?
- Explain how the referent helped you...?
- Is the total closer to 5 or 10?
- When you explored ways to decompose the number, how can you prove that you have the same quantity?
- When might you need to partition numbers?
- What strategies did you use to solve the problem?
- How would you justify your solution?

Understanding and Solving

- Using multiple strategies to engage in problem solving (i.e. Visual, oral, role-play, experimental, written, symbolic)
- Develop, construct, and apply mathematical understanding through role play, inquiry, and problem solving
- Engage in problem-solving experiences that are connected to place, story and cultural practices relevant to the local community
- When you explored ways to ..., how can you prove that you have the same?
- When might you need to ...?
- How many ways..? Show your strategies.
- How might you apply what you learned...?
- Why did you choose a specific strategy?

Communicating and Representing

- Communicate in many ways (concretely, pictorially, symbolically, and using spoken or written language to express, describe, explain, and apply mathematical ideas)
- Describe, create, and interpret relationships through concrete, pictorial and symbolic representations
- Use technology appropriately to explore mathematics, solve problems, record, communicate, and represent thinking
- What did you notice?
- How could you represent you thinking (concretely, pictorially, symbolically?
- How would you explain the strategy you used?
- Explain how you solved the problem.
- Explain what you learned.
- Draw a picture to show your thinking.
 How would your describe your solution?
- How would you model the concept and explain your thinking to others?
- Describe and compare...
- How would you interpret the relationships...?
- Explain how you know...
- Why does this make sense?
- Explore representing and describing ... What did you notice?
- How did you use technology to explore...?
- How did you use technology to solve the problem?
- How did you use technology to communicate and represent your thinking?
- Express your thoughts about your discoveries.

Connecting and Reflecting

- Visualize and describe mathematical concepts
- Connect mathematical concepts to each other and make mathematical connections to the real world (i.e. Daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration)
- Share and reflect upon mathematical thinking
- Draw upon local indigenous knowledge and/or expertise of local elders to make connections to mathematical topics and concepts

- How did you visualize to help solve the problem?
- Describe what you visualized when you were solving the problem.
- When might you use what you have learned?
- How might this connect to other mathematical concepts?
- How might you apply what you have learned?
- Demonstrate how you know this can be applied to other situations.
- How is this problem like something you solved before?

Think about how we can use these questions to help guide our assessment component of our Learning examples.