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.