

## Time and the Métis Sash

Subject: Mathematics  
Strand: Shape and Space

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Grade: 4

Content (topic)	
Exploring time representation	
Outcomes	Indicators
<p><b>SS 4.1:</b> Demonstrate an understanding of time by:</p> <ul style="list-style-type: none"> <li>• Reading and recording time using digital and analog clocks (including 24 hour clocks)</li> <li>• Reading and recording calendar dates in a variety of formats.</li> </ul>	<p><b>SS 4.1a:</b> State the number of hours in a day.</p> <p><b>SS 4.1b:</b> Express the time orally and numerically shown on a 12-hour analog clock.</p> <p><b>SS 4.1c:</b> Express time orally as “minutes to” or “minutes after” the hour.</p>
Mathematical Processes	
<ul style="list-style-type: none"> <li>• Communication</li> <li>• Connections</li> <li>• Visualization</li> </ul>	
Lesson Preparation	
Equipment/materials:	
<ul style="list-style-type: none"> <li>• Sashes that have been <a href="#">woven by students</a> or pieces of string</li> <li>• Take the classroom clock off of the wall or a classroom set of mini-clocks</li> </ul>	
Presentation	
Development	
<ul style="list-style-type: none"> <li>• Explain to the students that traditionally there were many ways in which Aboriginal people measured and recorded time. For example, many predictable phenomenon can be used to record the passage of time as the nature of time tended to be more philosophical rather than scientific. Tell the students that long before watches and classroom clocks, Aboriginal people were able to keep track of the passage of time based on the sun and moon. The cycles of the moon from full moon to three-quarter moon to half moon to one-quarter moon to new moon and back to full moon takes 28 days. As <math>28 * 13 = 364</math> and it takes 365 days for the Earth to go around the sun, a 13-Moon calendar is a natural way to count a yearly cycle.</li> <li>• Explain to students that traditionally there were many different purposes of the Métis sash. For example: The fringe on the end of the sash was often used as a sewing kit, hold important items by tying the items to the fringe, as a wash cloth and towel when the Métis were on the buffalo hunt, and even as a saddle blanket.</li> <li>• When the men were on the buffalo hunt, they often became engrossed in the hunt and days often overlapped into each other. At times, these</li> </ul>	

men would become unable to distinguish amounts of time. Sashes were used as a means of keeping track of time by tying a knot in the fringe at the end of each day.

- Have students take out their finger woven sashes or long pieces of wool, which they will be using to represent time.
- As students read the classroom clock to the nearest five minutes, explain to students that they need to think of creative ways to symbolize the time of the clock to the nearest five minutes. This can be done by tying knots in the fringes of their sash similar to what the men did when on the buffalo hunt.
- Ask the students to use the fringes of the sash to represent the time to the nearest five minutes and then take turns having those students explain their methods of symbolizing using the sash. For example, if the time were 2:12pm, students would represent the time of 2:10, as that is the closest five minutes. However, if it were 1:14, the closest five minutes would be 1:15.
- Encourage students to be creative in finding ways to symbolize time through the sash.
- If students are having trouble, show them an example of how to use the sash to represent minutes. For example, if the clock is set to 8:05, separate eight strands of wool from the sash and tie one knot in those fringes having one knot if one knot is decided to be equal to five minutes.