

TAWOW

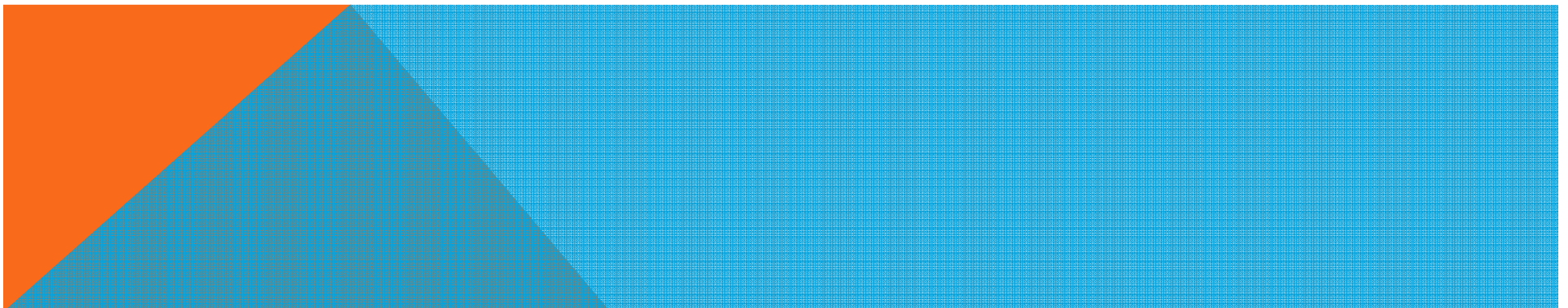
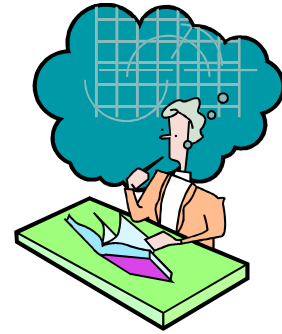
FNMI MATH WORKSHOP DECEMBER 5, 2013



Presented by Sharon Meyer NESD FNMI
Assisted by Katie White NESD CIA
Power Point formatted by Karen Holowka C.R. V.P.

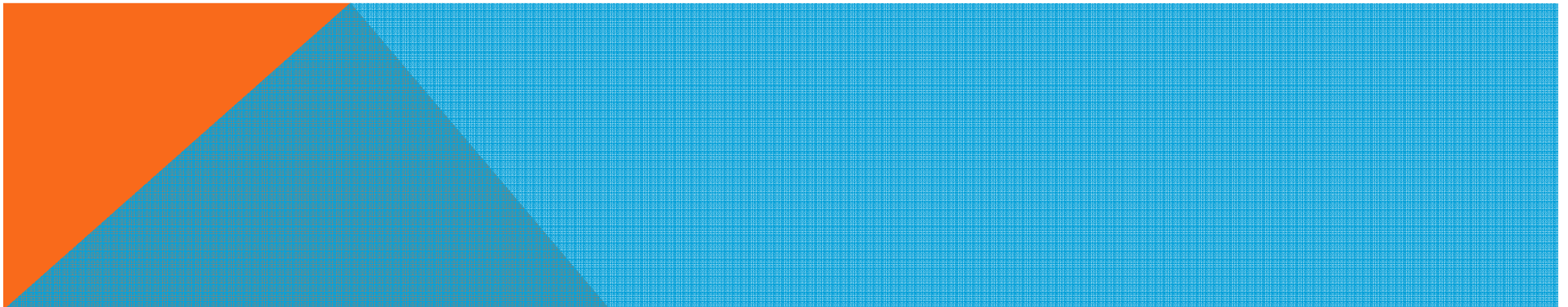
BIG QUESTIONS

- How does worldview impact our understanding of math?
- How does our use and understanding of math reflect our worldview?
- How can FNMI worldviews build understanding of mathematics concepts for everyone?



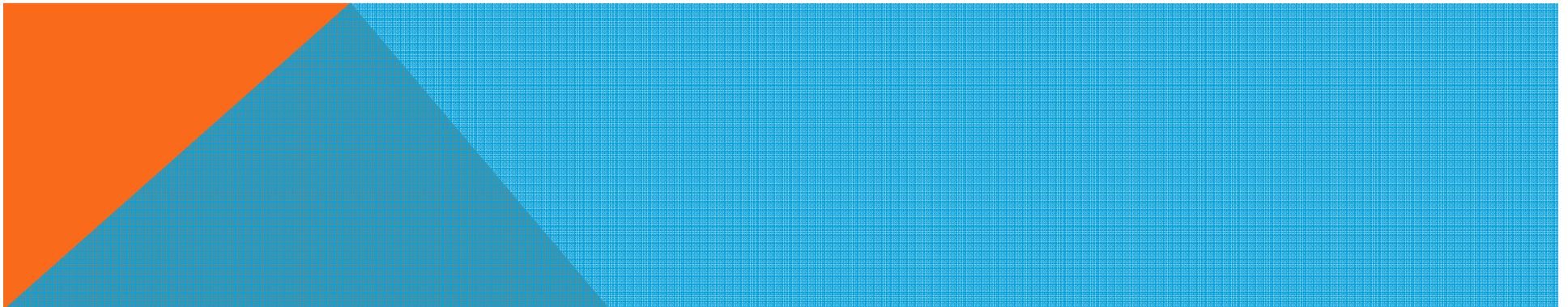
AGENDA

9:00 - 9:20	Group brainstorm
9:20 - 10:15	Historical reflections (Pre-contact)
10:15 - 10:30	Wellness break
10:30 - 12:00	Medicine Wheel Connection (Games)
12:00 - 12:45	Lunch
12:45 - 1:45	Contemporary FNMI Math
1:45 - 2:00	Wellness break
2:00 - 2:45	Individual exploration time
2:45 - 3:00	Reflection and Feedback

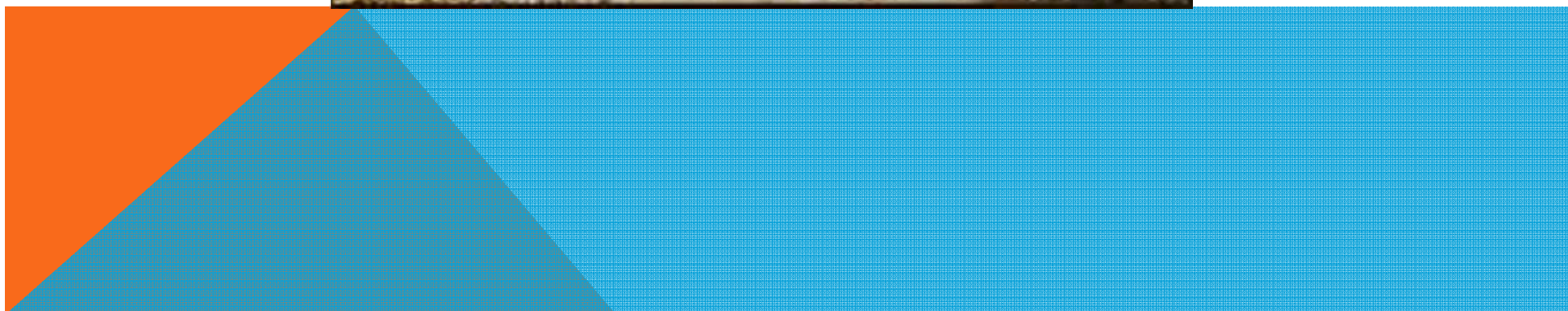
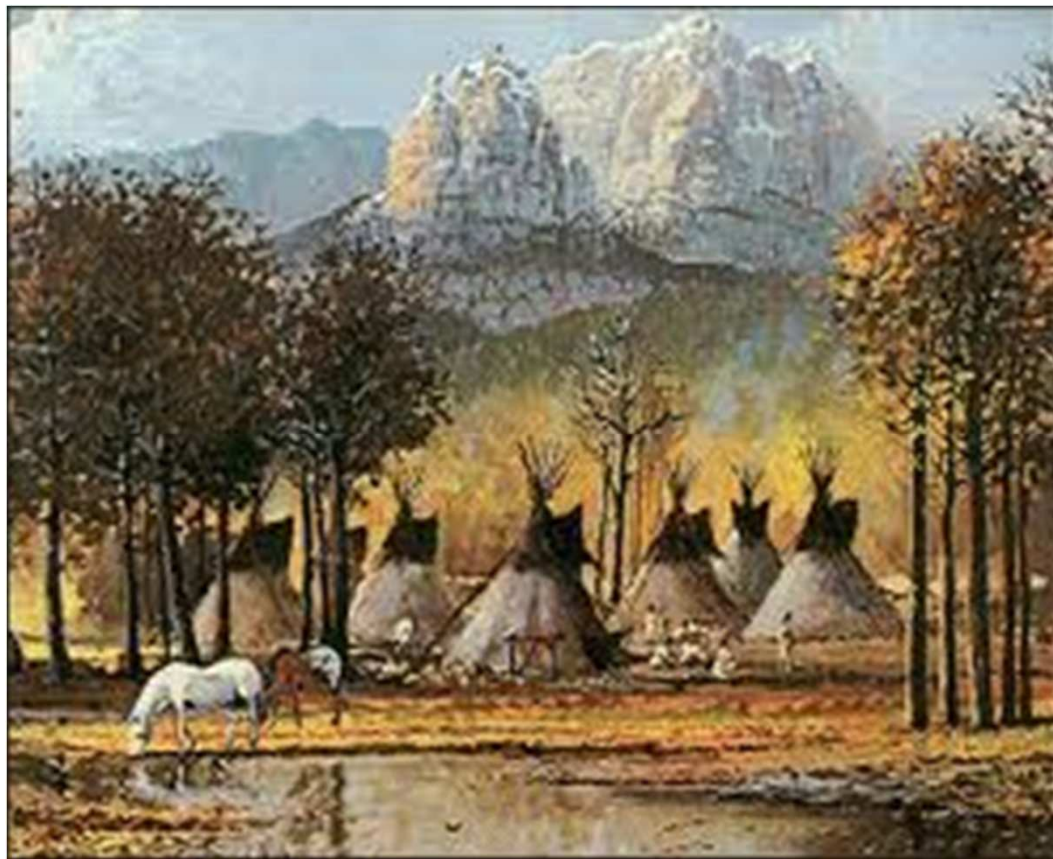


GROUP BRAINSTORM

What materials were available to First Nations and Inuit people pre-contact?

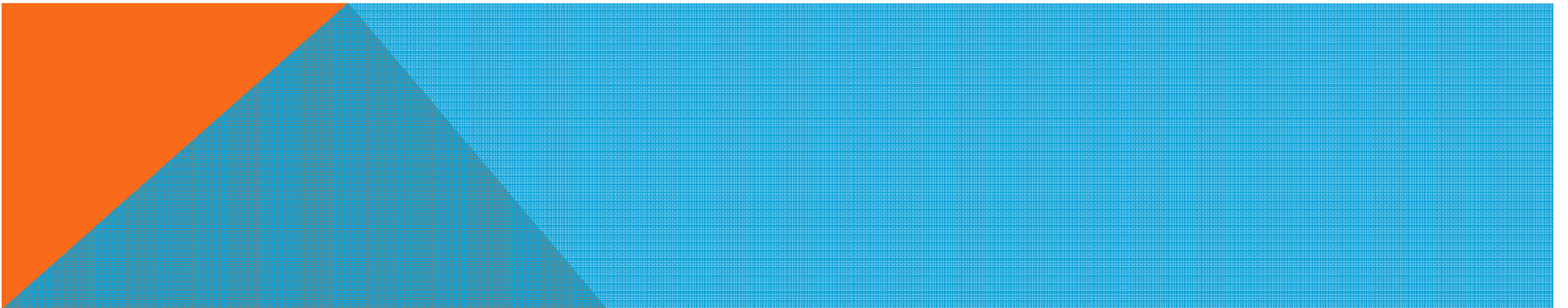


EARLY CONTACT



POSSIBLE RESPONSES

- Rocks
- Sticks
- Leaves
- Feathers
- Hides
- Antlers
- Bones
- Clay
- Plant dye
- Berries
- Shells
- Sinew
- Bark





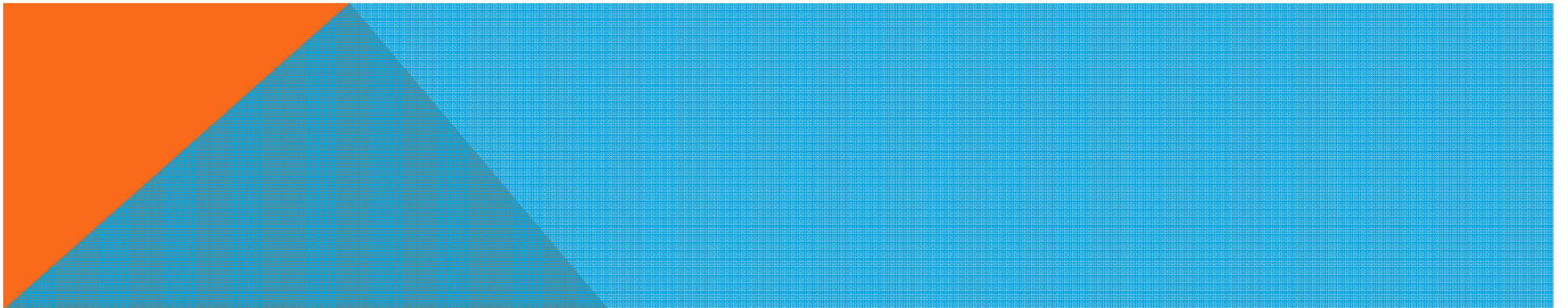
REFLECTIONS OF PRE- CONTACT FNI MATH

“Constructivism, ethnomathematics, and teaching through an inquiry approach are supportive of a holistic perspective to learning”

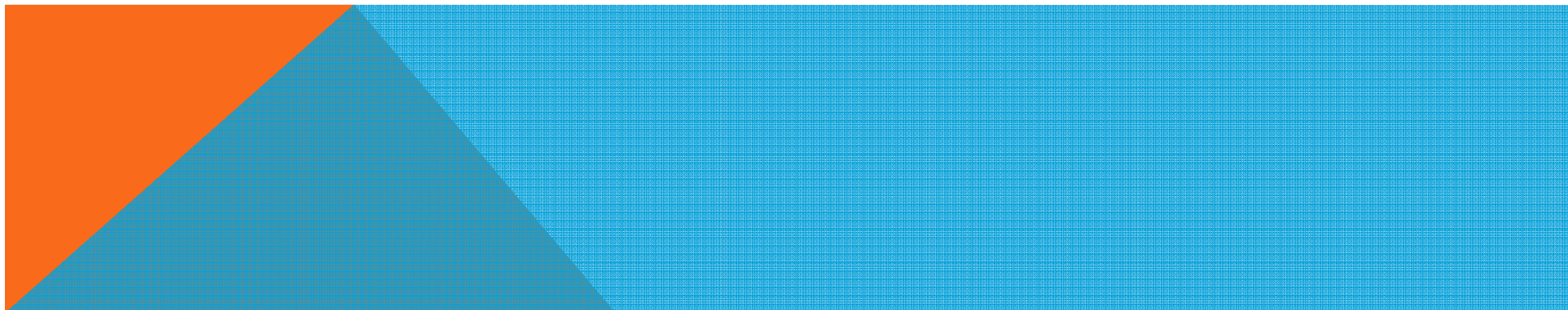
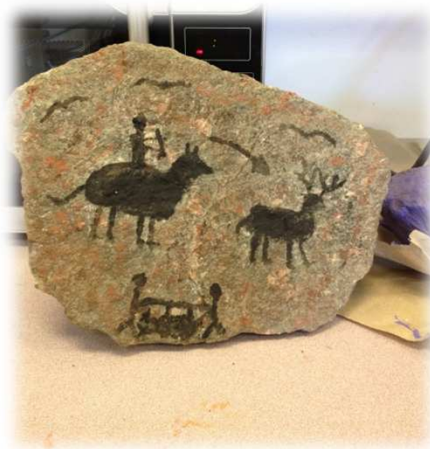
Ministry of Education 2011

Ethnomathematics – relationship between mathematics and cultural anthropology. It is used to translate earlier forms of thinking into modern-day understandings

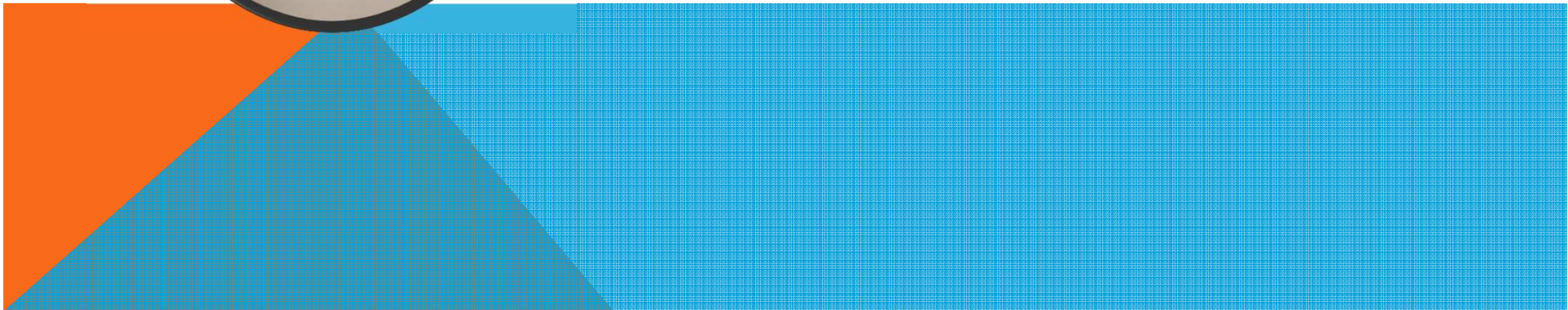
ROCK PAINTINGS



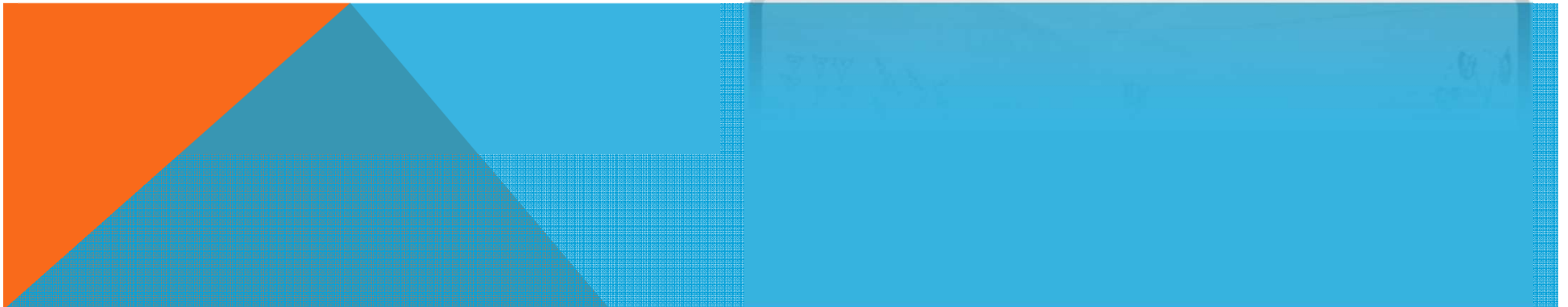
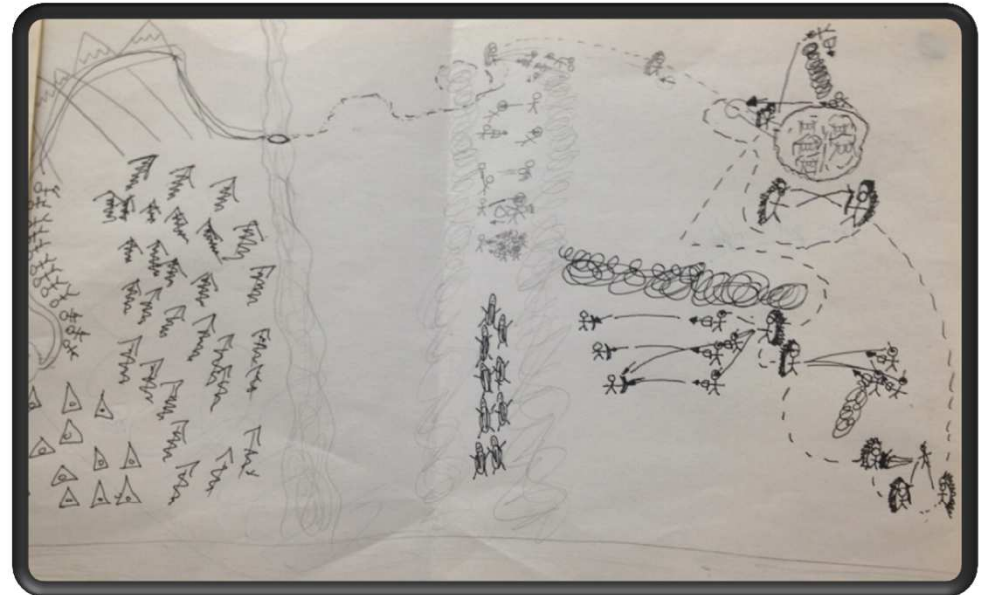
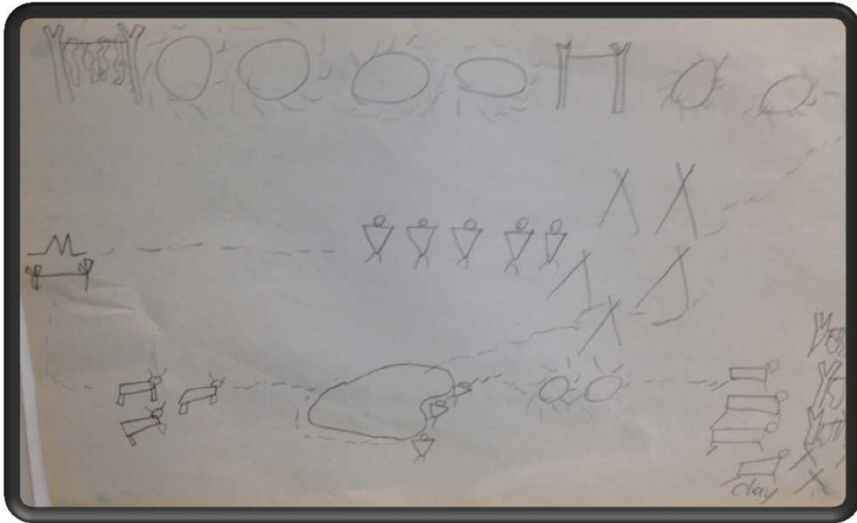
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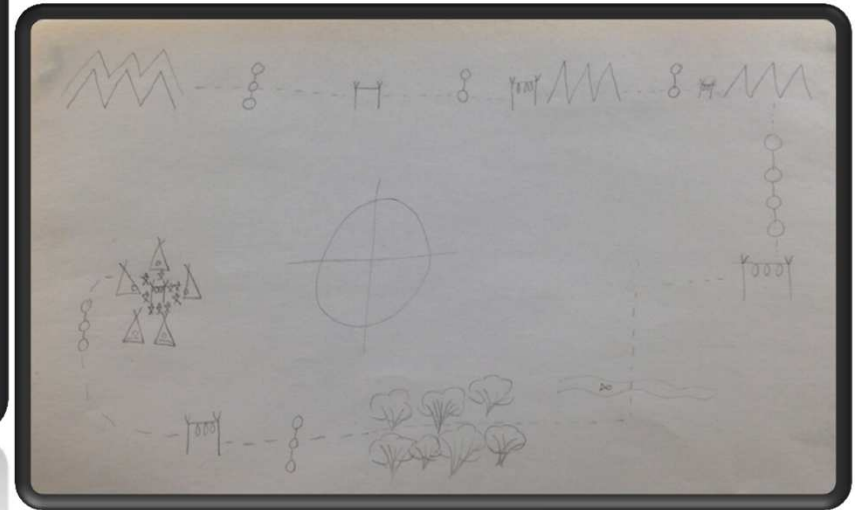
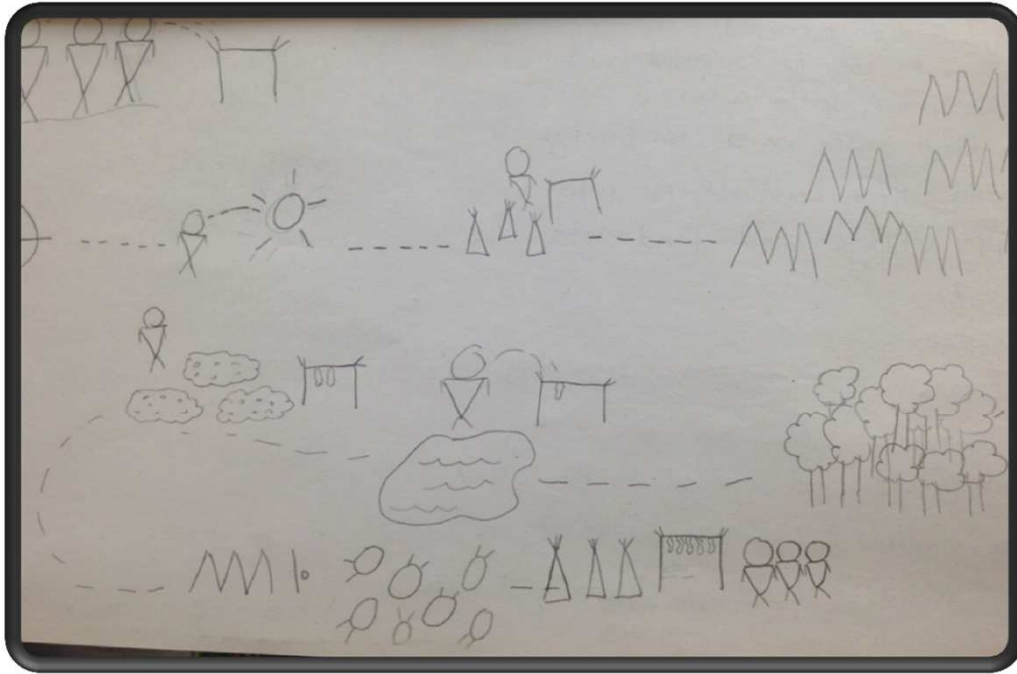
ROBE PAINTINGS



ROBE PAINTINGS/HIDE STORIES



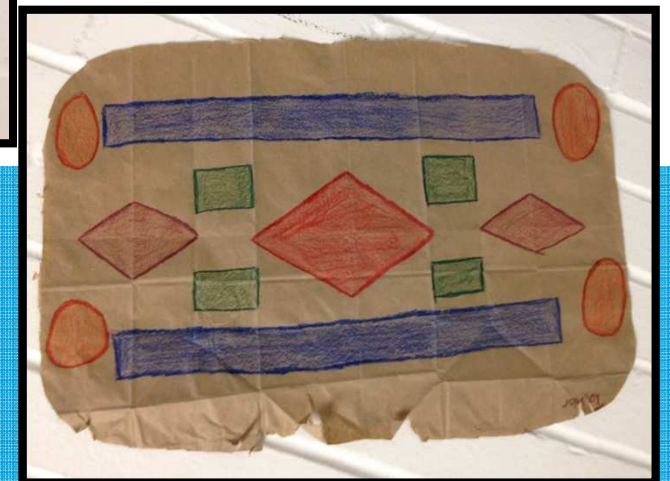
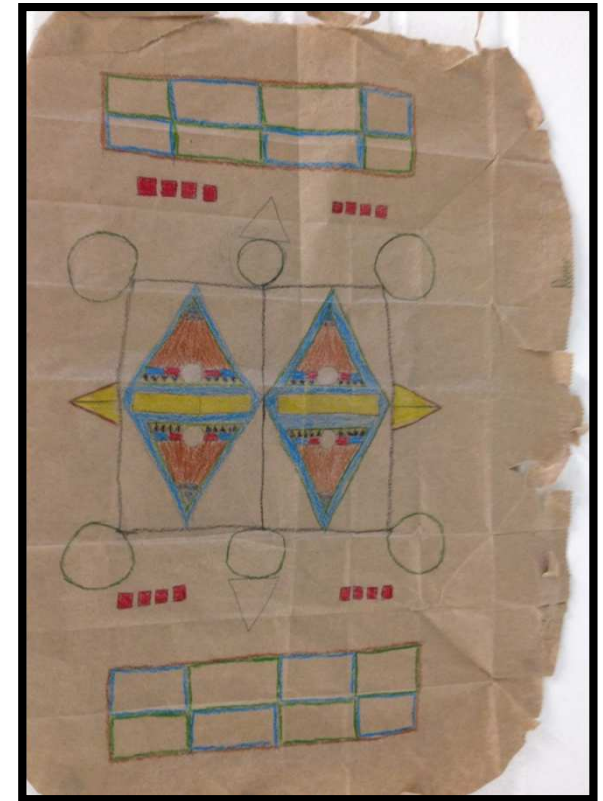
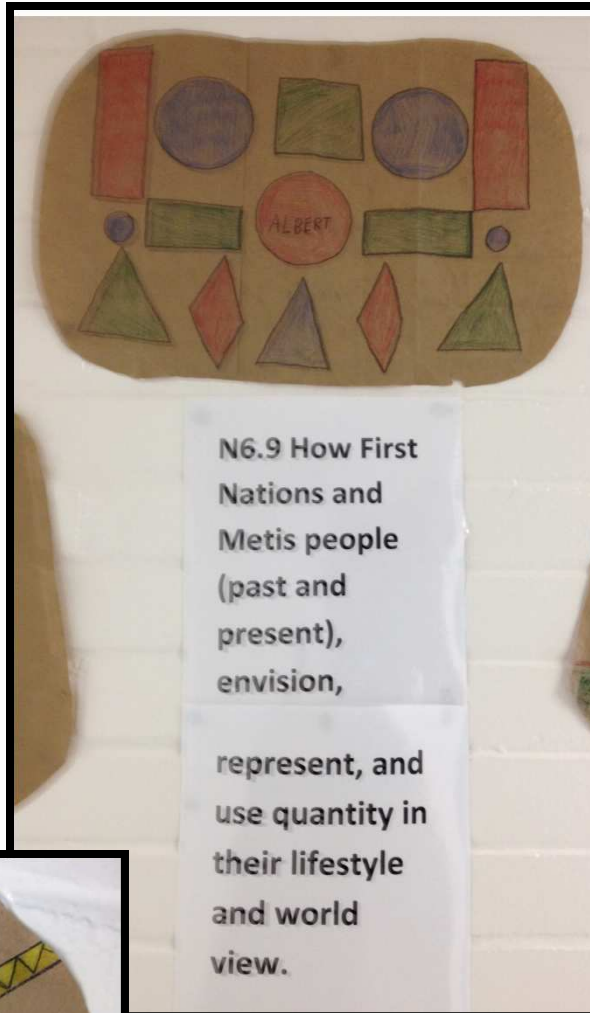
ROBE PAINTINGS/ HIDE STORIES



PARFLECHE



PARFLECHE



CLOTHING

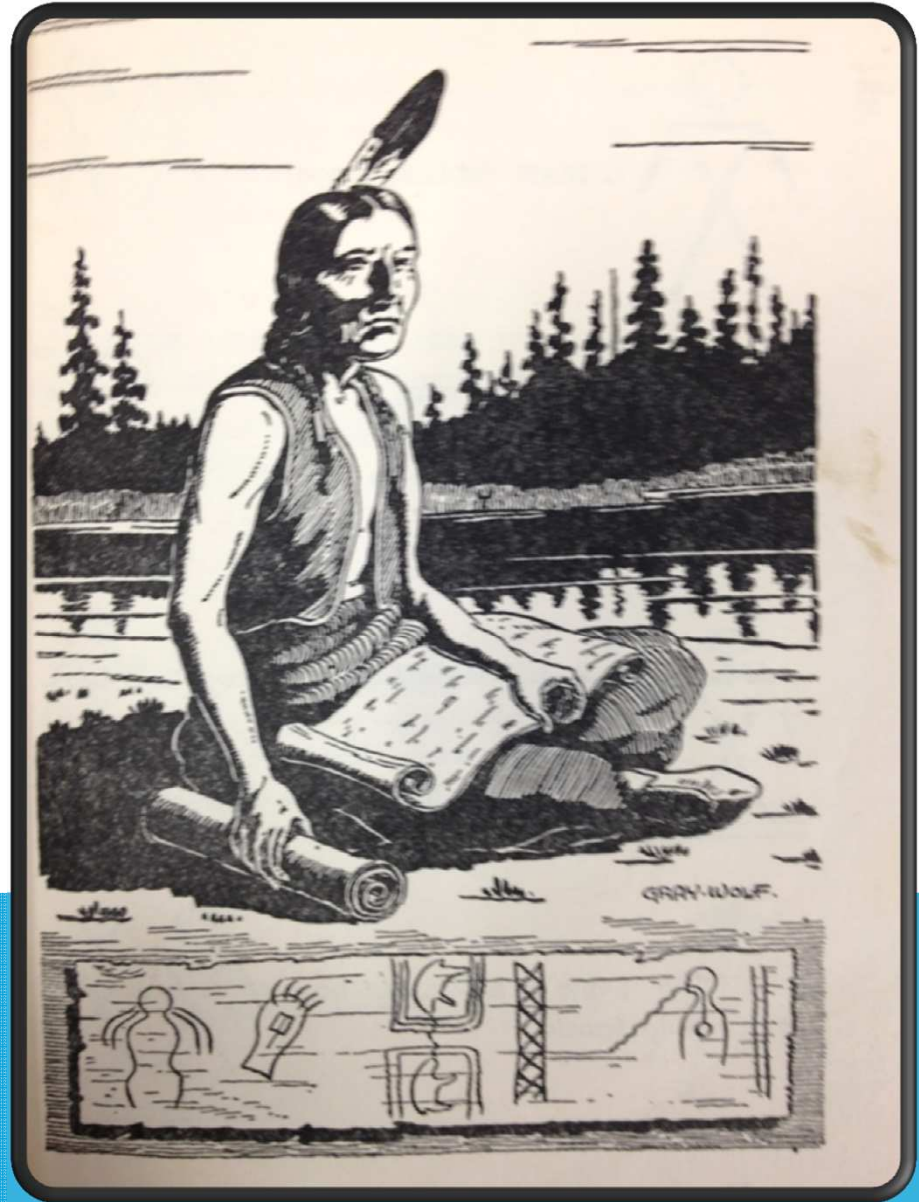


*Bone Needle
and
Sinew Thread*

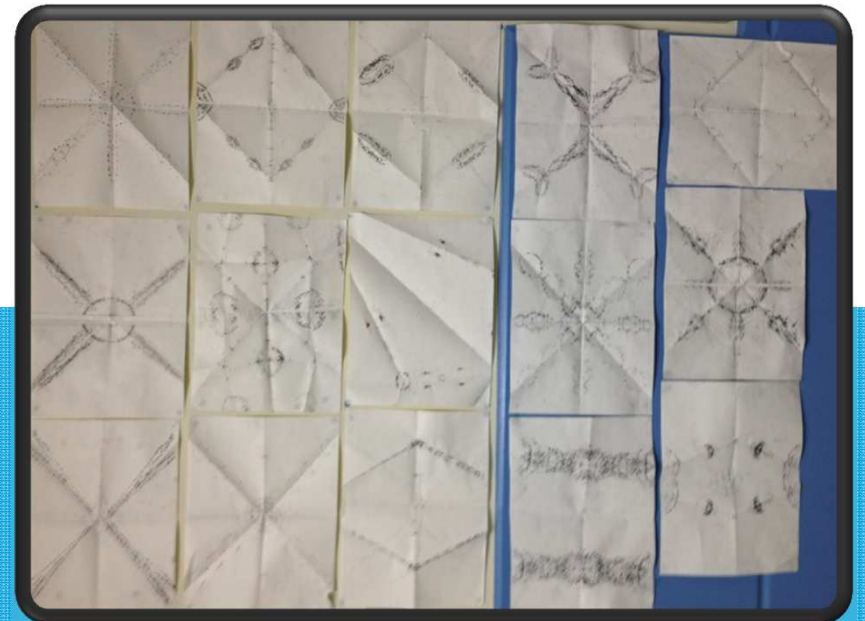
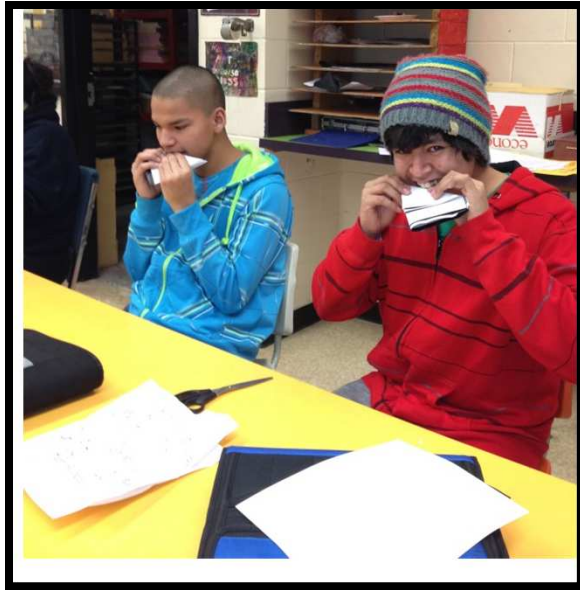
CLOTHING



BIRCH BARK BITING



BIRCH BARK BITING



Medicine Wheel Connections



GAMES





GAME NEEDS:

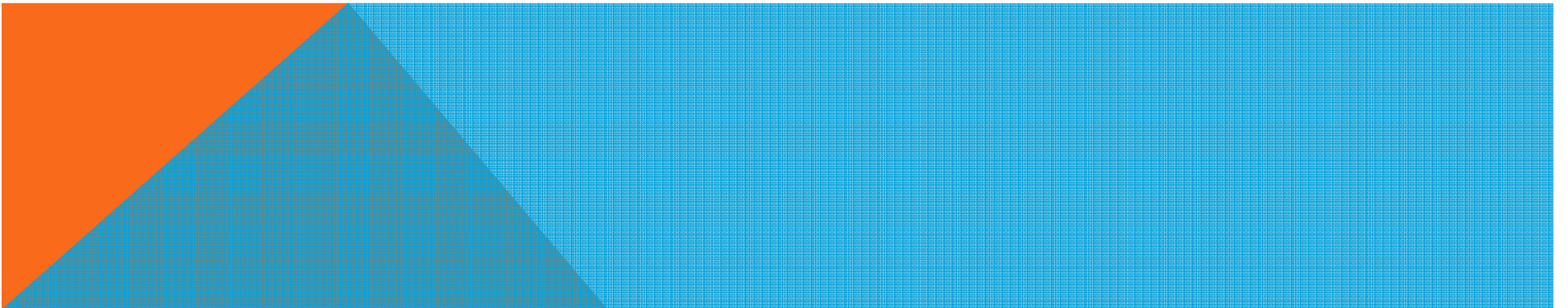
- Game name
- Game materials
- Game players
- Game rules
- How is game won?

GAMES

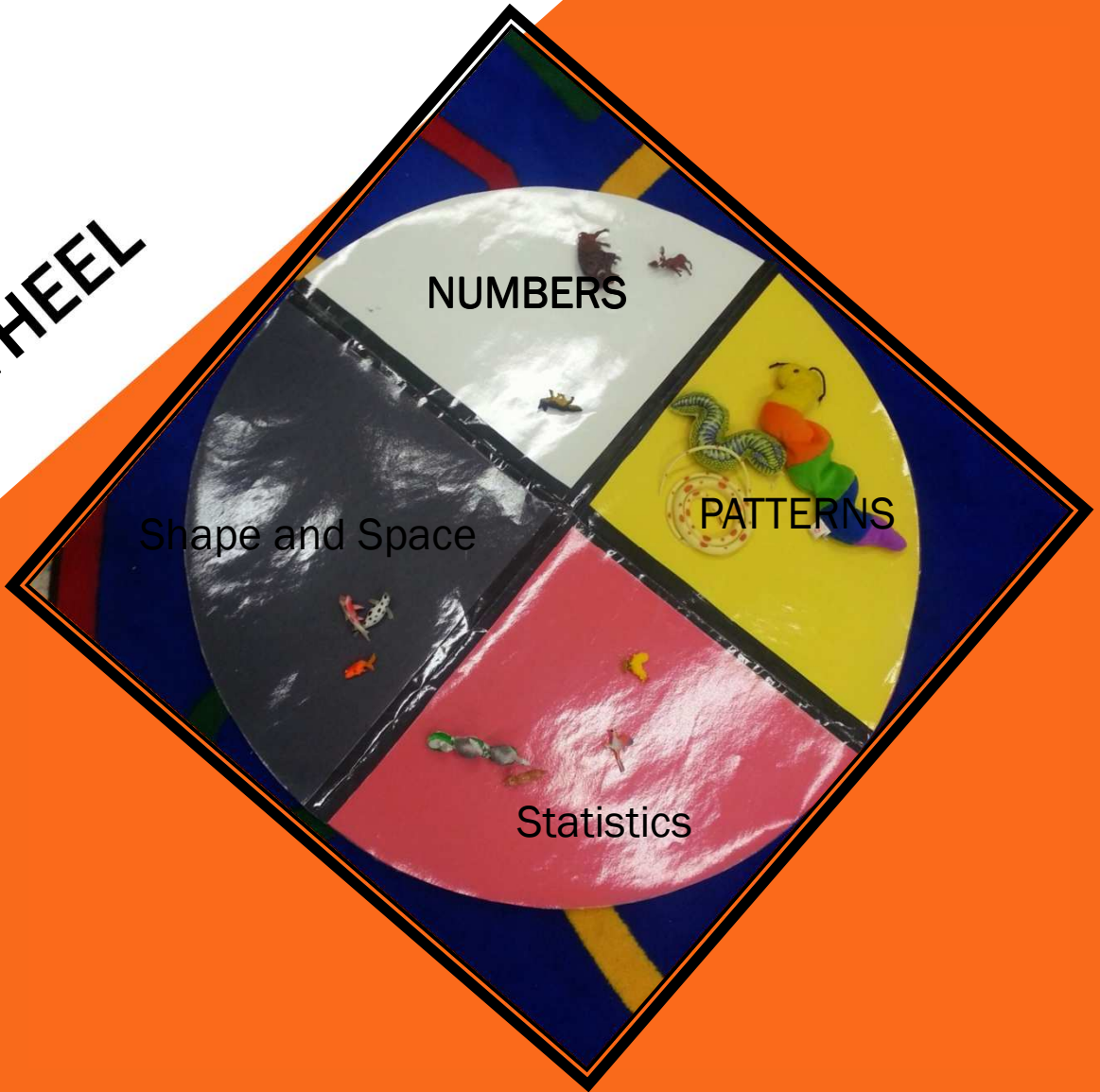


STICK-DICE VARIATIONS (PAIR ACTIVITY)

- Each pair uses their instructions for a Stick-Dice game.
- Each pair prepares the necessary materials.
- Practice the game.
- Present the game (Jigsaw)
- Make connections to our math curriculum

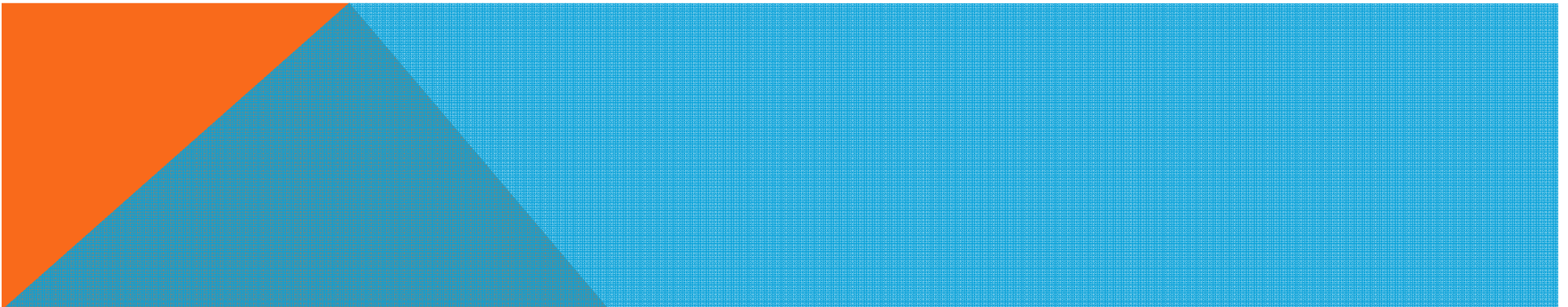


MEDICINE WHEEL

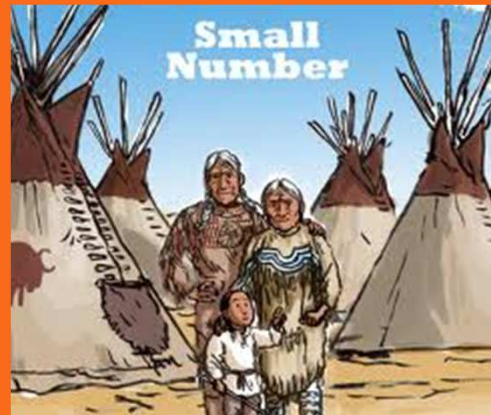


GAMES WITHIN THE MEDICINE WHEEL

- Review the four strands in math as related to the medicine wheel (Numbers, Patterns, Statistics and Probability, Shape and Space)
- Get into pairs (will be provided with a game)
- Play the game
- Decide which strand(s) the game fits and which skills are being practiced
- Share as a whole group



INTRODUCTION TO CONTEMPORARY FNMI MATH



Samples and examples



Loganbur...

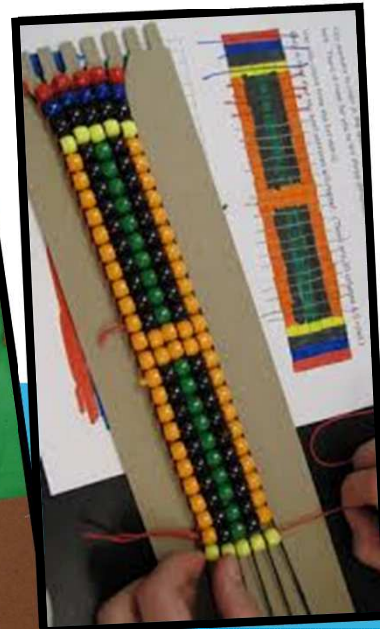
Jaray

Alhonda th...

Phye

N6.9 How First Nations and Metis people envision, represent, and use quantity in their lifestyles and world view.

SavannaS



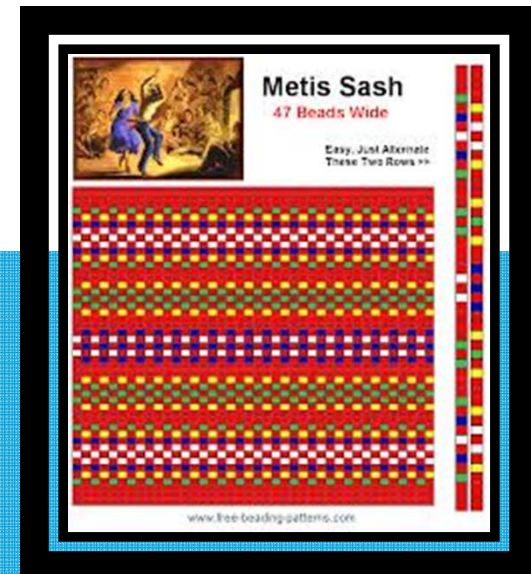
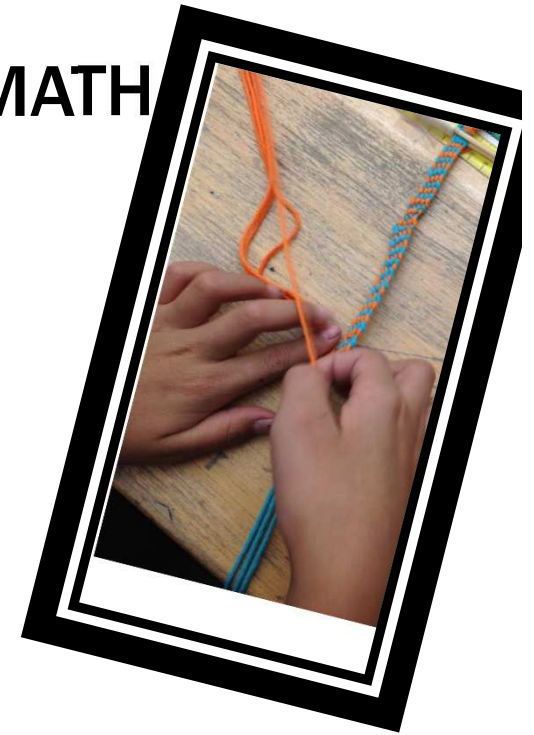
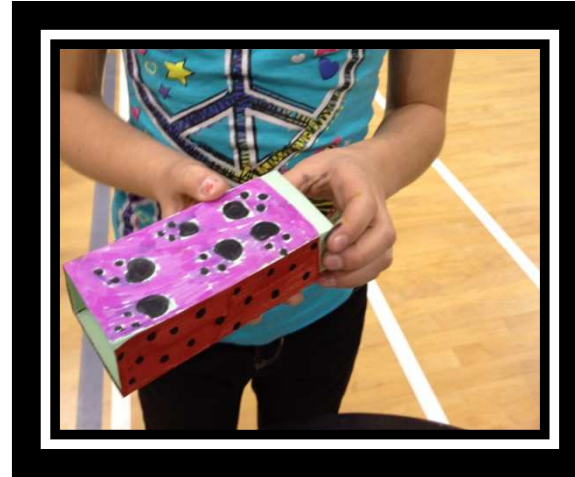
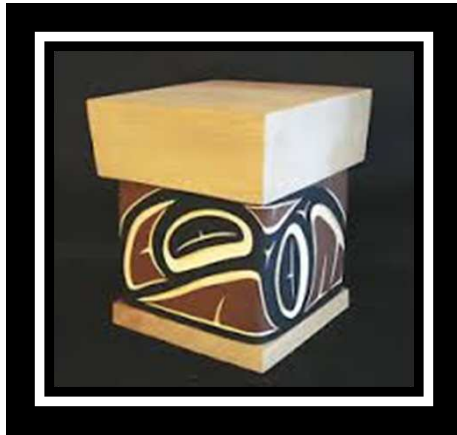
CONTEMPORARY FNMI MATH THEMES



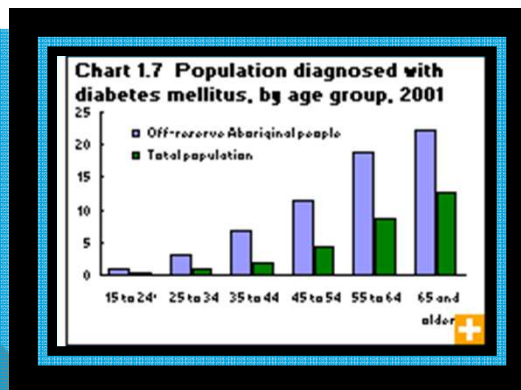
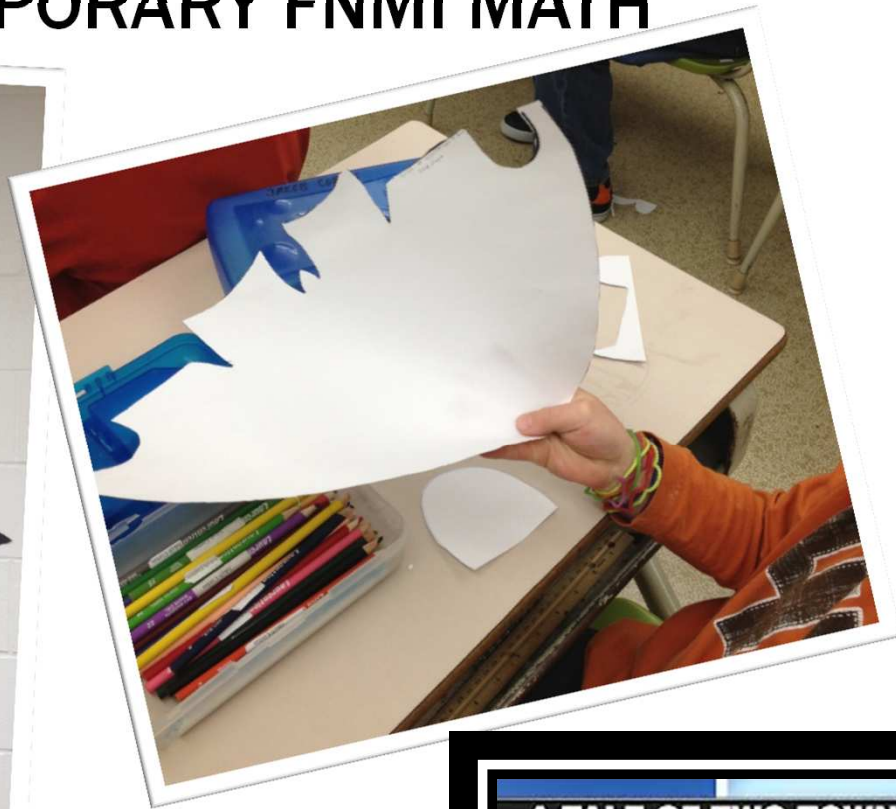
MORE CONTEMPORARY FNMI MATH



SOME MORE CONTEMPORARY FNMI MATH



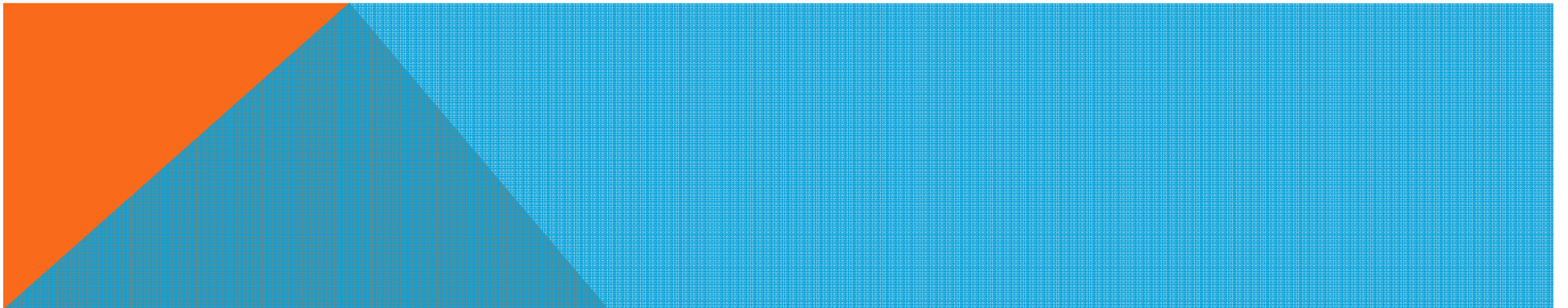
EVEN MORE CONTEMPORARY FNMI MATH



A TALE OF TWO TOWNS

ATTAWAPISKAT (NATIVE RESERVE)	ATIKOKAN (NON RESERVE)
Population:	
1,529	3,293
Operating Budget:	
\$31.2M	\$8.4M
Chief/Mayor Salary:	
\$71,000	\$7,713
Average Income:	

Time to explore
and share



FINAL REFLECTION

Two Sticky notes:

Yellow Sticky Note – Comment on what you appreciated from your learning today.

Blue Sticky Note – If there were to be another FNMI Math day what would you recommend to add?

Ekosi!



Time to have reciprocal teachings