FNESC Mathematics First Peoples

Lesson Suggestions + Connection to Curriculum Materials:

*This is by no means a finite list of possibilities*

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| **THEMES**  | **Sub-topics**  | **Grade 8 Math Concepts**  | **Grade 9 Math Concepts**  |
| **Family & Ancestry**  | Family trees  | * number percentages (A3)
* fractions (A6)
 | * powers and exponents (A1)
 |
| **Travel and Navigation**  | Stars and landmarks  | * Pythagorean theorem (C1)
* rates ratios & proportional reasoning (A5)
* operations with integers (A7)
 |  |
| Tides  | * 2-variable linear relations (B1)
* linear equations (B2)
* data presentation (D1)
 | * generalizing patterns using linear equations (B1)
* graphing linear relations (B2)
* modeling & solving linear

equations (B3)  |
| Canoes (e.g., how they move, wakes relative to boat length and speed, *d*=*rt*) — *see Unit 2 for an example*  | * perfect squares & square roots (A1)
* approximate square roots (A2)
* 2-variable linear relations (B1)
* graph linear equations (B2)
* views of 3D objects (C5)
 | * square roots (A5)
* approximate square roots (A6)
* generalizing patterns using linear equations (B1)
* graphing linear relations (B2)
* scale diagrams of 2-D shapes (C4)
 |
| **Games**  | Games of chance (e.g., Lahal, bone game) — *see Unit 4 for an example*  | * data presentation (D1)
* chance and probability (D2)
 | * role of probability in society (D4)
 |
| **Land, Environment, & Resource Management**  | Hunting — *see Unit 5 for an example*  |  | * generalize a pattern (B1)
* graph a linear relation (B2)
* model & solve linear equations (B3)
* single-variable inequalities (B4)
 |
| Salmon (e.g., serving sizes, estimated catches, population dynamics) — *see Unit 8 for an example*  | * number percentages (A3)
* rates & ratios (A4)
* proportional reasoning problems (A5)
* linear relations (B1)
* statistics and probability (D1, D2)
 | * populations vs. samples (D2)
* data analysis plan (D3)
 |
|  | Food Gathering, (e.g., serving sizes, time management, storage capacities, predicted yields)  | * number percentages (A3)
* rates & ratios (A4)
* proportional reasoning problems (A5)
* fractions (A6)
* integer work (A7)
* linear relations (B1)
* statistics and probability (D1, D2)
 | * powers and exponents (A1)
* rational numbers (A3)
 |
| Pollution/ Contamination (e.g., monitoring toxicity levels in drinking water, aquatic life) — *see the Supplemental Unit for an example*  | * proportional reasoning problems (A5)
* linear relations (B1)
* linear equations (B2)
* statistics and probability (D1)
 | * generalizing patterns using linear equations (B1)
* graphing linear relations (B2)
* solving linear equations (B3)
* data analysis (D1, D2, D3, D4)
 |
| Cedar Harvest (e.g., calculating yield, sustainability)  | * surface area (C3)
* volume (C4)
 | * generalizing patterns using linear equations (B1)
* single-variable inequalities (B4)
* polynomial expressions (B5)
 |
| **Community Profiles**  | Contemporary & historical demographics  | * number percentages (A3)
* data presentation (D1)
 | * data analysis (D1, D2, D3, D4)
 |
| **Artwork**  | Totem Poles/ Monuments (e.g., designing, raising)  | * Pythagorean theorem (C1)
 | * ratios & scale (C4)
* symmetry (C5)
 |
| Bentwood Boxes — *see Unit 3 for an example*  | * ratios & scale (A4)
* 3-D nets (C2)
* surface area (C3)
* volume (C4)
* views of 3-D objects (C5)
* transformations – tessellation (C6)
 | * surface area of composite 3D objects (C2)
* ratios & scale (C4)
* line and rotational symmetry (C5)
 |
| Blankets — *see Unit 7 for an example*  | * transformations – tessellation (C6)
* Pythagorean theorem (C1)
 | * generalizing patterns using linear equations (B1)
* polygons (C3)
* ratios & scale (C4)
 |
| Drums (e.g., building, decorating, rhythms)  | * 3-D nets (C2)
* surface area (C3)
* volume (C4)
* multiply & divide positive fractions & integers (A6)
* transformations – tessellation (C6)
 | * circle geometry (C1)
* surface area (C2)
* scale diagrams (C4)
* line and rotational symmetry (C5)
 |
| **Nutrition**  | Cooking, Feast — *see Unit 1 for an example*  | * number percentages (A3)
* rates & ratios (A4)
* proportional reasoning problems (A5)
* multiply & divide positive fractions & integers (A6)
 | * fractions, decimals, percentages (A3)
 |
| **Dwellings**  | Circle dwellings (e.g., kickwilly/kekuli, igloo) — *see Unit 6 for an example*  |  | * circle geometry (C1)
* surface area (C2)
* scale diagrams (C4)
* ine and rotational symmetry (C5)
 |
| **Dwellings** | Longhouse | * perfect squares & square roots (A1)
* approximate square roots (A2)
* number percentages (A3)
* proportional reasoning problems (A5)
* views of 3-D objects (C5)
 | * surface area (C2)
* polygons (C3)
* scale diagrams (C4)
* line symmetry (C5)
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