SHAPES ON A TRAIN

MATH 1-3 - ACTIVITY OVERVIEW

CORE COMPETENCIES
✦ Model mathematics in contextualized experiences
✦ Visualize to explore mathematical concepts
✦ Connect mathematical concepts to each other and to other areas and personal interests
✦ Explain and justify mathematical ideas and decisions.

BIG IDEAS AND CONTENT
✦ G1/2 Objects and shapes have attributes that can be described, measured, and compared.
✦ Gr 3 Standard units are used to describe, measure, and compare attributes of objects' shapes.
✦ K Single attributes of 2D shapes and 3D objects
✦ G1 Comparison of 2D shapes and 3D objects
✦ G2 Multiple attributes of 2D shapes and 3D objects

BEFORE YOUR VISIT
✦ Review common shapes and their names
  ○ Square, triangle, circle, oval, rectangle, diamond, arch, etc.

✦ Have a conversation about where you can find shapes in the real world. Find examples of shapes in your classroom.

✦ Students can count how many of each shape they can find in their classroom. As a class, find out which shapes are the most common.

DURING YOUR VISIT - 50 MINUTES

ACTIVATE KNOWLEDGE 10 MINUTES	Students explore our Model Train Exhibit with their activity sheets. They look for real world examples of common shapes and count how many they can find.
NEW LEARNING 15 MINUTES	In the Royal Alexandra Hall, Students share what shapes they found and which they found the most of. They learn what are Strong Shapes (triangles and arches) and how they are used for building in the real world.
APPLY LEARNING 25 MINUTES	In groups of 3, students are given 12 index cards and a roll of tape. They think about the Strong Shapes that they learned about and try to make a bridge using those shapes. They test the strength of the bridge with a model train.

AFTER YOUR VISIT - IDEAS FOR APPLYING YOUR LEARNING
✦ Walk around Cranbrook and look for strong shapes in the buildings around town.
✦ Try using different materials to make a strong bridge as a class. Could it hold a whole student?

CRANBROOK HISTORY CENTRE