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A brief history of the Math Circle sponsored by Brigham Young University will be given. Three math circle activities will be presented that are interesting for students in grades five to twelve. Activity 1. Comparing the volume of a tetrahedron and an octahedron with the same edge lengths using the magnification principle—no formulas are needed. Activity 2. Probability and non-transitive dice. Activity 3. The Mysterious  $1/3$ . Explain the  $1/3$  in the volume formulas for pyramids and cones without calculus. (Received August 21, 2006)