

Investigation Guide – Monkeys and Bananas

Materials – Thirty (30) objects to act as bricks in a pyramid.

A tale of two pyramids

Two pyramids were built in the Australian Desert. One pyramid was made out of sandstone and the other from granite.

The sandstone pyramid (20 blocks) was double the volume of the granite pyramid (10 blocks).

Each year the dry winds of the desert eroded the pyramids. The sandstone eroded more quickly, at a rate of three (3) blocks every 200 years. While the harder granite pyramid eroded at one (1) block every 200 years.

1. How many years would it take the sandstone pyramid to fully erode?
2. How many years would it take the granite pyramid to fully erode?
3. Do the pyramids ever have the same volume? In which years might this happen?