

## *4-5 Thematic Curriculum*

### *Ancient Civilizations (Year 1) and Inventions and Discoveries (Year 2)*

*In one year, 4-5 students will focus their study on ancient civilizations, including Sumer, Alexandria, Beijing, Mesopotamia, Central Europe, China, Athens, England, Maya, and Africa. Students will study early astronomy/predictions from the sky, calendars, planting cycles, the arrival of surplus and the first economies, the history of money, arts, culture and the architecture of the world's great religious buildings, We will study the ancient silk trade routes, telescopes and sailing. Students will learn about the importance of the discovery of the importance of base 60, the discovery of zero, and mathematical and scientific tools such as the abacus and telescopes.*

*During the second year, 4-5 students will study the great geometers and mathematicians, ancient (Pythagoras, Archimedes, Euclid, etc.) and modern (Descartes, Newton, Pascal, Napier, Lovelace, etc.), and physical principals such as Newtonian mechanics and particle physics. We will return to architecture, this time with a focus on perspective, and the technical innovations two point perspective.*

#### *Sample activities:*

*-Our students create a floor plan of a building known to them from elevations.*

*-We find and replicate an early telescope*

*-Students map and recreate the silk route, creating a world map and "reliving" a voyage on the route through costume and custom. We build a historically-accurate ship in at the school, which becomes a play structure for the school*