



## Sultans of Science Gallery Guide

### Teacher's Key

Please note that this guide is designed to be completed in any order, so please do not feel that you have to complete this in the order that it is written.

### Geography

❖ On the map below, shade in the area of the Islamic Empire and label the following:

- A) Mediterranean Sea
- B) Arabian Sea
- C) Caspian Sea \* These can be found on the wall map at beginning of the Sultans of Science Gallery.



- ❖ When was the first Observatory Opened? **In 828**
- ❖ What happened in 1202? **Leonardo Finonacci introduces Arabic Numerals and Math into Europe.**
- ❖ When does the Muslim Calendar begin? **In 622**

## The Great Explorers

- ❖ Using the map in Question One, trace the route of Ibn Battua from 1325 to 1354.

**Found on the floor in the Great Explorers section of the gallery.**

- ❖ Sketch and describe an item that would have been traded by the Muslims.

**Gold, Silk, Ivory, Spices, Coins**

- ❖ Sketch and describe four items that would have been found on Zheng He's Treasure Ship.

**Garden, giraffes, cows, people, treasure, donkeys, horses, zebras, goats, sheep, chickens, sails, cabins, etc**

## Geometric Art

- ❖ Create a masterpiece on the magnet board and then draw your creation below. How many different shapes did you use? **Various answers.**

## Flight

- ❖ Sketch and label a flying machine of your own creation. **Various answers.**

## Water

- ❖ Sketch and describe one of the machines that move water.

**One Scoop or Four Scoop machine, Chain of Pots, Reciprocating Pump, Six Cylinder Pump.**

## Know Your Numbers

- ❖ Write the modern numbers 1-10 used in the Islamic world. **Found at the bottom of the display**

## Optics

- ❖ Sketch either the Side View Periscope or the Periscope. Describe how it works.

**Light rays enter the upper window and are reflected from mirror to mirror until the rays reach your eye.**

## Muslim Medicine

- ❖ Sketch and explain what three medical tools were used for. **Three of the many tools found in the Muslim Medicine section of the gallery.**
- ❖ What was your heart rate? **Various answers.**

## Technology & Inventions

- ❖ Sketch and describe three inventions of the Muslim World.

Any three of the following: **Magic Flask, Wudhu Machine, Perpetual Flute, Quadrant, Islamic Astrolabe, Samarkand Observatory.**

