THE RENAISSANCE REVEALED

BRUNELLESCHI: ENGINEER OF THE IMPOSSIBLE

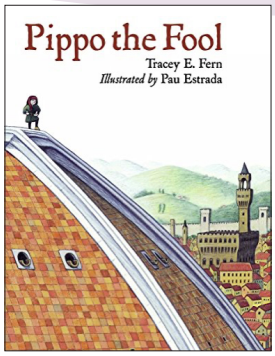
WHAT WE LEARNED:

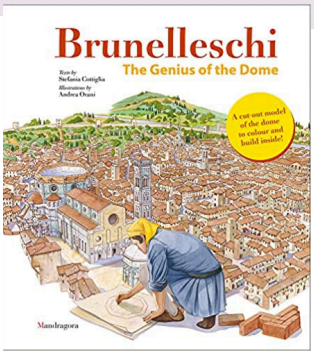
- Brunelleschi was an artist and an engineer.
- We saw how a dome works.
- We discussed linear perspective.

ART ACTIVITY:

Brunelleschi discovered a way to take a 3-dimensional object and accurately portray it on a 2-dimensional surface drawing. Using a vanishing point in artwork gives it depth and makes it look more realistic.

BOOK NOOK





Pippo the Fool
by Tracey E. Fern

Brunelleschi the Genius of the Dome
by Andrea Orani

FOR PARENTS:

At first, Brunelleschi's solution for completing the main cathedral in Florence wasn't fully appreciated. However, he designed and engineered an architectural wonder—something no previous architect was able to resolve. Brunelleschi invented the support tools and equipment to construct the dome too. As an artist, he rediscovered linear perspective, which was foundational to the realism and naturalism of Renaissance art.

PLEASE NOTE: As M&G's host location for *Homeschool Days*, Mack Library will feature books each month for parents to reference as resources. We hope these additional features will further support your teaching at home.

WORD SEARCH

Find and circle the words below:

BAPTISTERY
CATHEDRAL
DOME
ENGINEER
FLORENCE
EGG
GHIBERTI
GOLDSMITH
PERSPECTIVE
ITALY

D H D K O T T X K I U R I A U
P E R S P E C T I V E I R O R
B U Z B L Y Z J J M H T J Y D
I A I W L C T E C N E R O L F
R V P A O U M A F X M E O Q O
Y E T T E D T N Y P G B E Y B
Q I E X I H H Q J M O I E G I
U E M N E S I Y I O L H Y X G
G P N D I M T B S S D G I M B
H B R C C G U E W V S K Q J P
L A L K K T N R R K M D O M E
L H I K C A H E K Y I W R R M
D P T A N R F X G R T Z M A B
A Z Z X L B B C Z P H K R O T
D V H M M M M W Y T B B T J H

CONNECTIONS AT HOME: WEIGHT DISTRIBUTION PROJECT

Filippo Brunelleschi used an arched dome design to complete the cathedral and bear its own weight. Try this experiment at home to learn more about the strength of an arch... and an eggshell! Visit **here** for detailed instructions OR visit **here** to learn more about one family's experiment, plus view educational videos about Brunelleschi.

MATERIALS:

- Eggs (3-4 per person)
- Pencil
- Tape and/or sharp knife
- Heavy books or weights

DIRECTIONS:

1. Carefully mark with a pencil the half-point of each egg. Use a sharp knife or tool to cut the egg. Or tape the eggs in the middle and carefully break the shell in half.
2. Arrange the cut side of the eggshell on a flat surface—placing them in a way you think will best support and balance the weight of the books.
3. Test the arrangement by placing a book on top of the eggs. Add more books to see how much weight the shell arches can hold before cracking.

FURTHER FUN FACTS ABOUT FILIPPO BRUNELLESCHI

Kiddle Co.: Filippo Brunelleschi Facts for Kids
Brittanica Kids: Filippo Brunelleschi - Students
Drawing Academy: https://drawingacademy.com/brunelleschi-rediscovers-linear-perspective

Due to the changing nature of web resources, M&G strongly urges you as the parent to preview these sites before your child accesses them. The fact that these sites are available on this handout does not imply that M&G endorses their content from the standpoint of morals, philosophy, theology, or scientific hypotheses.

M&G Educational Mission:
Through tours, events, and publications, the Museum & Gallery seeks to partner with educators in fulfilling all of the National Visual Arts Content Standards. By integrating art into the core curriculum, M&G's goals are to teach children to value the arts, to communicate through the arts, to become creative problem solvers through the inclusion of STEAM-related concepts and fully-developed STEAM units, to understand history and culture in light of the arts, to improve literary interest and understanding through visual storytelling, to critique the arts, and to develop an aesthetic awareness of the arts. Through fulfilling the mission, M&G is able to help develop citizens who have the ability to think, feel, and understand the world in which they live.