**History of building construction 2018/2019**

**Lesson 1 Exercises**

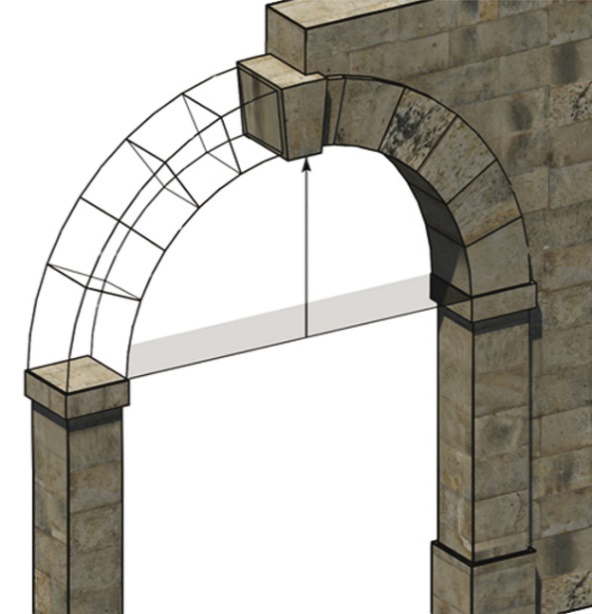
*27th February 2019*

Vocabulary

1. Cement
2. Concrete
3. Dome
4. Kiln
5. Limestone
6. Coffer
7. Quicklime
8. Buttress
9. Pier
10. Relieving arch
11. Haunch
12. Hydraulic mortar

1) a round roof with a circular base; 2) a type of white stone that contains calcium, used in building and in making cement; 3) a large oven for baking clay and bricks; 4) A recessed decorative feature used in vaults; 5) a grey powder made by burning clay and lime that sets hard when it is mixed with water; 6) A structure built up against a wall for support or reinforcement; 7) An arch built into a wall usually to counter the pressure from an opening below; 8) A column designed to support concentrated

loads; 9) a white substance obtained by heating limestone or marbles; 10) building material that is made by mixing together cement, sand, small stones and water; 11) the side of an arch between the crown and the pier; 12) a cementitious product which is capable of setting and hardening under water.



Connect the terms to the corresponding part of the arch:

a.Voussoir, b. Keystone, c. Haunch, d. Springing of the arch, e. Line of thrust, f. Intrados, g. Estrados, h. Span of the arch, i. Rise of the arch, j. Buttress; k. Crown of the arch

The Pantheon videolesson by prof. Diane Kleiner Comprehension

Complete the sentences

1) The model shown by professor Kleiner helps us to reconstruct the ancient Pantheon complex: analyse the description identifying the various components

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2) The Pantheon is at the same time traditional and innovative: ……………………………………………………………………………………………………………………………………………………………………………………

3) The function of the relieving arches on the circular drum of the Rotunda

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4) Describe a typical frigidarium and illustrate the similarities with the Pantheon’s plan

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6) Hadrian vs. Apollodorus of Damascus a controversial relationship

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7) Dione Cassio’s and Hadrian’s pumpkin domes

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8) “What are pumpkin domes?”

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9) The Temple of Venus and Rome and its podium

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Lynne C. Lancaster, *Materials and construction of the Pantheon in relation to the developments in vaulting in antiquity* Comprehension

Complete the sentences

Relieving arches and their use in theaters and amphitheaters p.117

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The relieving arches and the “creep” p. 118

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The role of the relieving arches and barrel vaults in the cylindrical wall of the Pantheon’s Rotunda p. 119-120

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The springer block and their role p. 120

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The use of lightweight “caementa” p. 120

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The function of the stepped rings of the Pantheon’s dome p. 123

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**It’s the time to debate!**

The different version about Pantheon’s relieving arches

Diana Kleiner

Lynne C. Lancaster

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