Building the Great Cathedrals
PBS Nova – Video

1. How long did it take to build a cathedral?
   100 years

2. How were the stones lifted to the top?
   “squirrel cage” - man walks inside giant wheel and hoists stones up

3. What did pre-Gothic (Romanesque) cathedrals look like?
   Dark and bulky, no light, small rounded windows, thick walls

4. According to Abbot Suger, what is a symbol for God?
   Light - by bringing light in he hoped to bring the people closer to God

5. What is Romanesque building technique?
   Rounded arches, narrow windows to support the weight of the wall

6. What are the differences between Romanesque and Gothic Cathedrals? (need three reasons, answer throughout the video)
   1. pointed arches
   2. flying buttresses - supporting the arch
   3. ribbed vaulting - to support ceiling

7. What is the benefit of a pointed arch? What are engineers then able to do?
   - Allows for engineers to build higher
   - Pointed arches are less likely to fall down (with flying buttresses) because the stress line goes to the ground

8. What shape are most Gothic Cathedrals?
   A cross
9. What is the problem at Amiens cathedral?
   - The arches are not structurally stable
   - The flying buttresses were not at the right spot

10. What do you need to support an arch? Describe what engineers did to make sure walls did not collapse.

   Need flying buttresses; to make sure the walls did not collapse engineers installed an iron chain

11. How are ceilings constructed? Why are they constructed this way?

   With ribbed vaulting - constructed so force pushes down into the column, not the walls which allows openings in the wall for windows

12. What do stained glass windows depict? How could they help those that could not read?
    Scenes from the Bible
    This helped people who could not read because it brought the Bible to life.
    People could understand visual representations of the story even if they did not understand the written version.

13. What is the purpose of a cathedral?

    To bring ordinary people closer to God

14. CRITICAL THINKING QUESTION: What conditions do you need in a society in order to build a cathedral? (not in video, think about it!)

    Need peaceful and stable conditions
    - you are not going to invest so much time and money into a building that could be destroyed in a war or feudalistic society
    - this shows the changes in stability in European politics since the fall of Rome.
    - Before, people built castles. Now they build cathedrals.