WHERE POSSIBLE, ANSWER ALL THE QUESTIONS, WITH NOTES AND SKETCHES. CLICK THE FAMOUS BUILDINGS FOR HELPFUL LINKS.

PROPERTIES OF MATERIALS - KNOWLEDGE MAP

1. EXPLAIN THE PROPERTY CALLED 'TENSILE STRENGTH'. INCLUDE A SIMPLE TEST FOR THIS PROPERTY.

2. DESCRIBE ELASTICITY AND INCLUDE A SIMPLE TEST.

3. WHAT IS PLASTICITY? DESCRIBE AN EXAMPLE.

4. WHAT IS THE DIFFERENCE BETWEEN DUCTILITY AND MALLEABILITY?

5. DESCRIBE A WORKSHOP TEST FOR DUCTILITY AND MALLEABILITY.

6. WHAT IS MEANT BY 'CONDUCTIVITY' OF A MATERIAL? HOW CAN IT BE MEASURED?

7. WHAT IS A 'DROP TEST', IN RELATION TO MEASURING THE HARDNESS OF A MATERIAL? INCLUDE A DEFINITION FOR THE PROPERTY 'HARDNESS'.

8. EXPLAIN ABSORBENCY.

9. WHAT IS THE PROPERTY DEFINED AS, 'A material's 'mass', per unit of volume'? EXPLAIN THIS PROPERTY.

10. DESCRIBE AN EXAMPLE OF FUSABILITY.

11. HOW WOULD YOU DESCRIBE THE 'YIELD STRENGTH' OF A MATERIAL?

12. DEFINE 'STRAIN' AND SKETCH A WORKSHOP TEST.

13. HOW IS THE 'STIFFNESS' OF A MATERIAL DETERMINED? INCLUDE A DEFINITION OF THIS PROPERTY.

14. SELECT ONE OF THE 'PROPERTIES' OF A MATERIAL AND DESCRIBE A COMMERCIAL / INDUSTRIAL TEST FOR IT.

15. WHAT IS THE 'TOUGHNESS' OF A MATERIAL? HOW IS IT MEASURED?

Can you name all these famous buildings?