

1. CD-ROM: Go through the Sedimentary Rocks section of your lecture text CD-ROM (*and/or the chapter in your lab manual and/or lecture textbook, but most students like the CD-ROM better*)

2. Rock Types and Definitions:

Look up (and write down) short definitions/explanations for the following terms

3. Quiz questions: included here – answer them before taking the quiz online.

lithification

Groups of Sedimentary Rocks

clastic (detrital)

chemical (monominerallic)

inorganic (precipitated)

biochemical (biogenic)

Types of Sedimentary Rocks

conglomerate

sandstone

mudstone/shale

rock salt

gypstone (gypsum)

coal

limestone

coquina

chert

dolomite

Example Quiz Questions

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- | | |
|---|---------------------|
| 1. Made from compacted dead plant material in a swamp. | • conglomerate |
| 2. Made of clastic detritus, most of which is $< \frac{1}{16}$ mm in diameter | • coal |
| 3. Made of clastic detritus, most of which is $\frac{1}{16}$ -2mm in diameter | • coquina |
| 4. Made of clastic detritus, much of which is greater than 2mm in diameter. | • gypsum (gypstone) |
| 5. Made almost entirely of visible seashell fragments | • mudstone/shale |
| 6. Made from evaporating seawater | • sandstone |
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7. These types of rocks are made of rock fragments and chips of other rocks.
- chemical
 - clastic (detrital)
 - extrusive
 - igneous
 - intrusive
 - metamorphic
 - plutonic
 - volcanic
8. Cementation is a type of
- plutonic
 - volcanic
 - lithification
 - metamorphic
9. Coal is a clastic sedimentary rock.
- True
 - False
10. Rock salt is most commonly a biogenic sedimentary rock.
- True
 - False
11. Conglomerate is a chemical sedimentary rock.
- True
 - False
12. Coquina is a clastic (detrital) sedimentary rock
- True
 - False

13. Mudstone/shale is a chemical sedimentary rock.

- True
- False

14. Rock salt is a clastic (detrital) sedimentary rock.

- True
- False

15. Limestone is a chemical sedimentary rock.

- True
- False

16. Coquina is a biochemical(biogenic) sedimentary rock

- True
- False

17. Gypsum is a most commonly a biogenic sedimentary rock.

- True
- False

18. Coal is a biogenic sedimentary rock.

- True
- False

19. Sandstone is a clastic (detrital) sedimentary rock.

- True
- False

20. Mudstone/shale is a clastic (detrital) sedimentary rock.

- True
- False

21. Conglomerate is a clastic (detrital) sedimentary rock.

- True
- False

22. Rock salt is an inorganic (precipitated) chemical sedimentary rock.

- True
- False

23. Sandstone is a chemical sedimentary rock.

- True
- False

24. Gypsum is an inorganic (precipitated) chemical sedimentary rock.

- True
- False

25. Gypsum is a clastic (detrital) sedimentary rock.

- True
- False

26. Gravel, sand and mud can be lithified into conglomerate.

- True
- False

27. Gypsum (gypstone) can be formed from evaporating seawater.

- True
- False

28. Fossils are most likely found in what type of rocks?

- igneous
- metamorphic
- sedimentary

29. Conglomerate is a biochemical rock.

- True
- False

30. Sandstone is a biochemical rock.

- True
- False

31. Mudstone/shale is a biochemical rock.

- True
- False

32. Rock salt is a clastic (detrital) rock.

- True
- False

33. These types of rocks were once molten

- igneous
- metamorphic
- sedimentary

34. These types of rocks are an accumulation of particles or debris

- igneous
- metamorphic
- sedimentary

35. These types of rocks have been altered or deformed by heat or pressure (squeezed, smashed or cooked) – without being melted.

- igneous
- metamorphic
- sedimentary

36. Igneous Rocks were once molten

- True
- False

37. Sedimentary rocks were smashed, altered and/or deformed.

- True
- False

38. Metamorphic rocks are accumulations of debris or particles.

- True
- False

39. Lithification generally applies to

- igneous rocks
- metamorphic rocks
- sedimentary rocks

40. Which of the following are appropriate for lithification? (*select all choices that are correct*)

- cementation
- compaction
- conglomerate
- mudstone
- sandstone

41. Limestone is made of

- aluminum oxide
- calcium carbonate
- calcium fluoride
- calcium sulfate
- carbon
- copper carbonate
- iron oxide
- iron sulfide
- lead sulfide
- magnesium carbonate
- silicon dioxide
- sodium chloride
- zinc sulfide

42. Chert is made of

- aluminum oxide
- calcium carbonate
- calcium fluoride
- calcium sulfate
- carbon
- copper carbonate
- iron oxide
- iron sulfide
- lead sulfide
- magnesium carbonate
- silicon dioxide
- sodium chloride
- zinc sulfide

43. Identify the rock in this photo.



- basalt
- chert
- coal
- conglomerate
- gabbro
- granite
- gypsum (gypstone)
- limestone
- mudstone
- obsidian
- pumice
- rhyolite
- rock salt
- sandstone
- scoria

44. Which of the following apply to limestone (or are limestone)?
(choose all appropriate answers)

- biochemical
- CaCO_3
- CaSO_4
- calcium carbonate
- calcium sulfate
- chert
- coal
- coquina
- extrusive
- igneous
- intrusive
- metamorphic
- plutonic
- sedimentary
- silicon dioxide
- SiO_2
- volcanic

45. Which of the following apply to chert? (choose all appropriate answers)

- CaCO_3
- CaSO_4
- calcium carbonate
- calcium sulfate
- chalk
- coal
- coquina
- extrusive
- igneous
- intrusive
- metamorphic
- plutonic
- sedimentary
- silicon dioxide
- SiO_2
- volcanic

46. Which of the following apply to gypsum (gypstone)?
(choose all appropriate answers)

- biochemical
- CaCO_3
- CaSO_4
- calcium carbonate
- calcium sulfate
- chalk
- chert
- coal
- coquina
- extrusive
- igneous
- inorganic (precipitated)
- intrusive
- metamorphic
- plutonic
- sedimentary
- silicon dioxide
- SiO_2
- volcanic

47. Lithification generally applies to (choose all appropriate answers)

- clastic (detrital rocks)
- conglomerate
- extrusive rocks
- igneous rocks
- intrusive rocks
- metamorphic rocks
- mudstone/shale
- plutonic rocks
- sandstone
- sedimentary rocks
- vesicular rocks
- volcanic rocks

48. Select all of the following that are correct/appropriate/true.

- basalt: igneous
- basalt: sedimentary
- biochemical (biogenic): igneous
- biochemical (biogenic): sedimentary
- cementation: lithification
- chert: igneous
- chert: intrusive
- chert: mafic
- chert: plutonic
- chert: sedimentary
- clastic (detrital): igneous
- clastic (detrital): sedimentary
- coal: biogenic
- coal: clastic (detrital)
- coal: igneous
- coal: intrusive
- coal: plutonic
- coal: sedimentary
- compaction: lithification
- conglomerate: biochemical (biogenic)
- conglomerate: clastic (detrital)
- conglomerate: igneous
- conglomerate: sedimentary
- extrusive: igneous
- extrusive: sedimentary
- fossils: igneous
- fossils: sedimentary
- gabbro: igneous
- gabbro: sedimentary
- granite: igneous
- granite: sedimentary
- gypsum (gypstone): biochemical (biogenic)
- gypsum (gypstone): clastic (detrital)
- gypsum (gypstone): igneous
- gypsum (gypstone): inorganic (precipitated)
- gypsum (gypstone): mafic
- gypsum (gypstone): sedimentary
- gypsum (gypstone): sialic
- inorganic (precipitated) chemical: igneous
- inorganic (precipitated) chemical: sedimentary
- intrusive: igneous
- intrusive: sedimentary
- limestone: igneous
- limestone: intrusive
- limestone: mafic
- limestone: mafic
- limestone: plutonic
- limestone: sedimentary
- limestone: sialic
- lithification: igneous
- lithification: sedimentary
- mudstone/shale: biochemical (biogenic)
- mudstone/shale: clastic (detrital)
- mudstone/shale: igneous
- mudstone/shale: sedimentary
- obsidian: igneous
- obsidian: sedimentary
- plutonic: igneous
- plutonic: sedimentary
- pumice: igneous
- pumice: sedimentary
- rhyolite: igneous
- rhyolite: sedimentary
- rock salt: biochemical (biogenic)
- rock salt: clastic (detrital)
- rock salt: igneous
- rock salt: inorganic (precipitated)
- rock salt: mafic
- rock salt: sedimentary
- rock salt: sialic
- sandstone: biochemical (biogenic)
- sandstone: clastic (detrital)
- sandstone: igneous
- sandstone: sedimentary
- scoria: igneous
- scoria: sedimentary
- vesicles: igneous
- vesicles: sedimentary
- volcanic: igneous
- volcanic: sedimentary

The whole point of this pre-lab is to make the 3-hour lab easier for you. You need to be familiar with the vocabulary and concepts before the lab starts....otherwise you won't know what you are doing...and your lab partners aren't going to want to work with you! If you work through these questions and look up all of the answers and write them down, then the online quiz should be a "piece of cake". The online quiz is open notes and open book; however, it is timed...and if you have not looked up the answers ahead of time, you will not have time to look them up during the quiz.