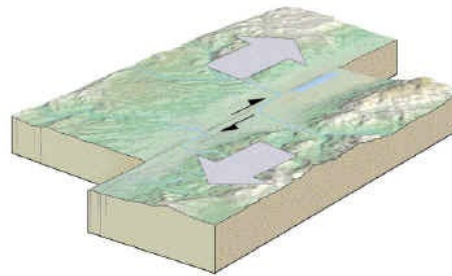
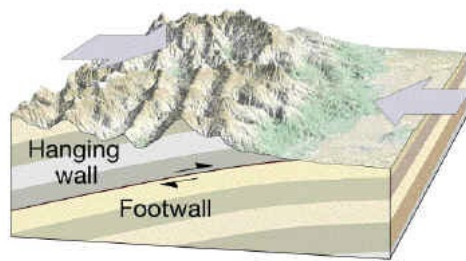
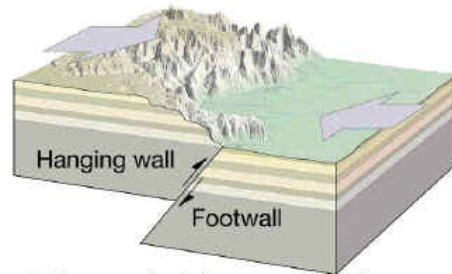
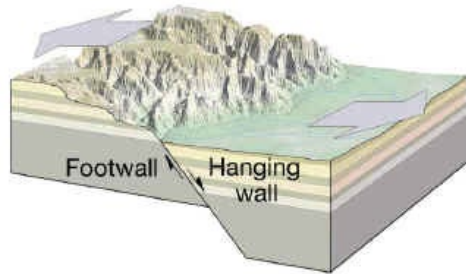


GEOG 4350 EXAM 1 REVIEW

This sheet contains example exam questions drawn from lectures and labs. Notice that geomorphology is a very visual subject – some questions may require you to draw a sketch, other questions present a sketch and ask you questions about it.

1. Name the following features; explain their origins and distinguishing characteristics.



2. Explain the principle of isostasy in the context of geomorphology.

3. Define the following:

a. craton b. shield c. platform d. orogenic belt

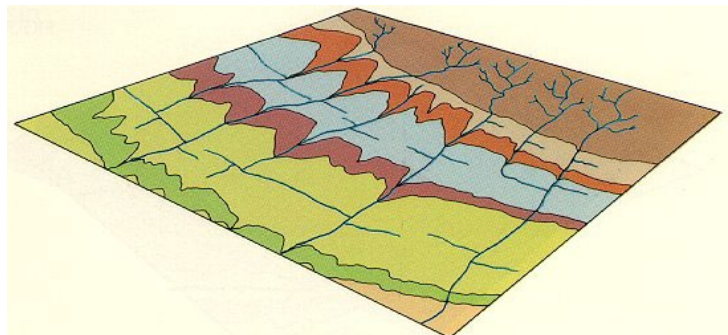
4. Explain how intracratonic rifting has influenced the landscape of southern Oklahoma.

5. On a sketch **map** of Texas, indicate the location of, and write notes on, a. The Llano Estacado b. The Balcones Escarpment c. The Laramide Tectonic Front.

6. Define a. composite cone b. cinder cone c. shield volcano d. sill e. dyke

7. Using a sketch, describe the geomorphology and geology of the White Rock Escarpment in Dallas.

8. Use the following outcrop map to explain the “Law of V’s”



9. On the following map of North America, label each listed region (by letter) and, for each region, add descriptive notes on typical rock types, geologic structures and landforms.

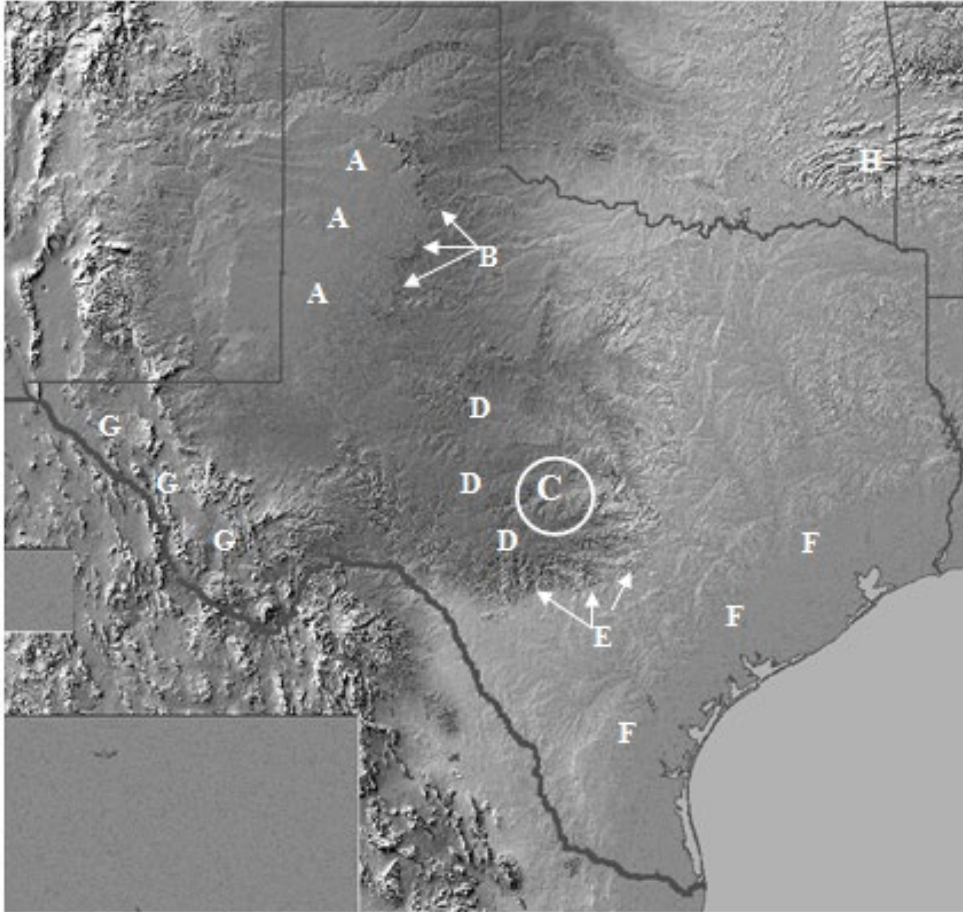


- A. Platform:
- B. Coastal plain:
- C. New orogenic belt:
- D. Old orogenic belt:
- E. Shield:

10 a. with the aid of a sketch of a geologic **map** of an area of tilted layers of sedimentary rock, explain the Law of V's.

b. with the aid of a **geologic cross-section** sketch, describe typical landforms that develop on gently tilted layers of sedimentary rock subjected to differential erosion (based on lab 2).

11. Name each indicated feature and, for each, describe origin, typical rock types, geologic structures and landforms. (A is a region; B is the edge of region A; C is a region; D is a region; E is the edge of region D; F is a region; G is a region; H is a region. All features were on lab 1).



12. For the **Colorado** and **Columbia Plateaus**, describe the following.

Colorado Plateau:

- a. typical rock types
- b. origin
- c. topography

Columbia Plateau

- a. typical rock types
- b. origin
- c. topography

13. What is a lahar? Why do they constitute a hazard? Name a recent example from the U.S.

14. What factors determine whether folds or faults occur in a rock subjected to stress? Give two examples from the U.S.

15. Draw a sketch of a cross-section through a plate boundary undergoing Cordilleran-type orogenesis. Indicate the following features: trench, accretionary wedge, deformed passive margin deposits, volcanic arc, zone of folded rocks, zone of faulted rocks, plutons, back-arc basin.

16. Define a. differential erosion b. strike valley c. cuesta

17. With the aid of sketches, describe the development of consequent streams, subsequent streams, resequent streams and obsequent streams on a newly emergent coastal plain.

18. How does granitic magma and basaltic magma differ? Describe typical landforms associated with each.

Exam 1 will consist of a choice of 4 out of 6 of the questions above.