

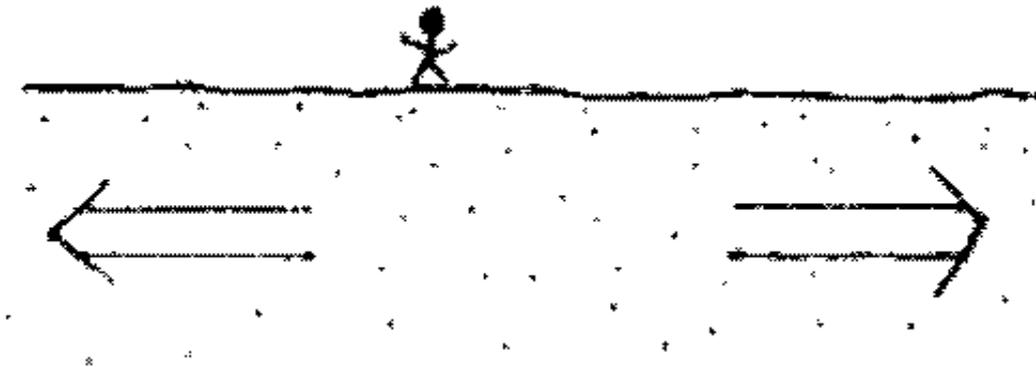
Deformation and Structure Self-Test: 15 questions

Special Instructions:

Using your mouse, click on the one, BEST answer. Upon completion of the exam, click the SUBMIT button, and the exam will be graded for you. You will also have the opportunity to review how well you answered each question.

1. *Stress* is defined as:

- strain divided by elasticity
- the point of rupture
- unit deformation
- force per unit area
- strain as measured at the yield point



2. The forces acting across the cross-section (above):

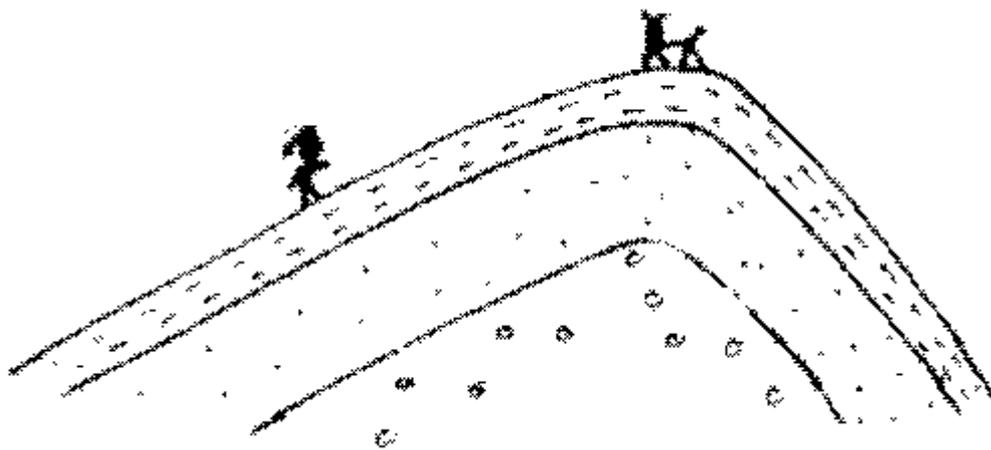
- are compressional
- would induce normal faulting
- lead to folding of rocks
- induce thrust faulting
- cannot exist in nature

3. Strain, without rupture, in which earth material retains the configuration induced by stress is:

- plastic
- brittle
- elastic
- compressional
- tensional

4. Development of a joint represents what type of strain?

- plastic
- brittle
- elastic
- compressional
- tensional



5. Ms. Stick (and her mighty dog, *Twig*) are shown above standing on a(n):

- symmetrical anticline
- overturned anticline
- symmetrical syncline
- overturned syncline
- asymmetrical anticline

6. An imaginary surface that divides a fold into two mirror images is a(n):

- hinge
- fold axis

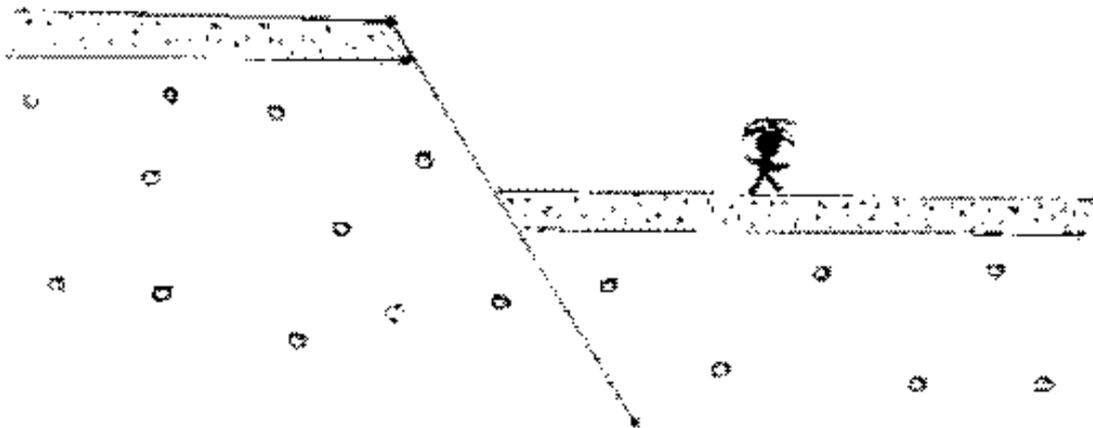
- axial plane
- limb
- nose

7. Which one of the following statements is always TRUE?:

- If the fold axis is plunging, the fold is plunging.
- The axial plane of a recumbent fold is vertical.
- Anticlines are associated with tensional stresses.
- Monoclines cannot plunge.
- A dome is a structure in which beds dip towards a central point.

8. Slickenlines trending straight up-and-down a planar rock exposure would be associated with a:

- strike-slip fault
- dip-slip fault
- joint
- monocline
- fold axis



9. Ms. Stick is shown above standing on the _____ wall of a _____ fault.

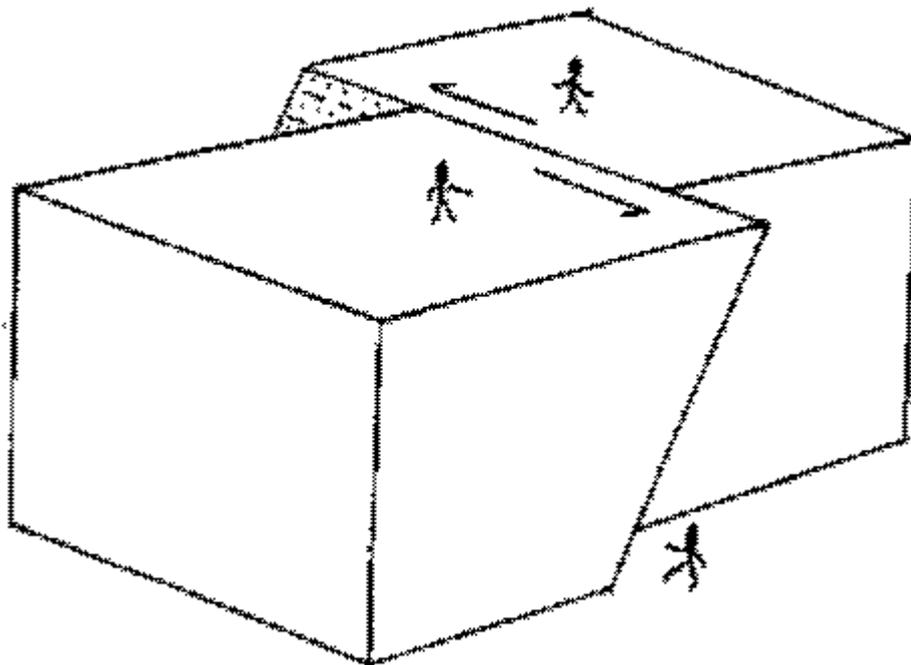
- hanging, reverse
- hanging, normal
- foot, reverse
- foot, normal
- foot, thrust

10. Folds in which the limbs are parallel or sub-parallel are:

- plunging
- recumbent
- chevron
- formed by tensional stress
- isoclinal

11. A nappe would be best associated with:

- regions of elastic strain
- zones of severe tension
- a wrench fault
- a very low angle thrust fault
- strike-slip faulting



12. The diagram above illustrates:

- dextral strike-slip faulting
- sinistral strike-slip faulting
- dextral dip-slip faulting
- sinistral dip-slip faulting
- thrust faulting

13. A nose is associated with:

- strike-slip faulting
- dip-slip faulting
- a wrench fault
- a plunging fold
- a non-plunging fold

14. A monocline is:

- a single-limb fold
- a fold with a vertical axial plane
- a fold with a horizontal axial plane
- the only type of fold associated with tensional stress
- a polished surface indicative of faulting

15. A hinge is:

- the fault block overlying the foot wall
- the fault block overlying the hanging wall
- the zone of greatest curvature on a fold
- the zone where a limb intersects the land surface
- a thin mass of rock thrust up on top of another by nearly-horizontal faulting