



ACROSS

- 7 _____'s law of elasticity is an approximation that states that the amount by which a material body is deformed is linearly related to the force causing the deformation.
- 10 Fracture _____ is a property which describes the ability of a material containing a crack to resist fracture.
- 12 _____ strain is a strain that acts parallel to the face of a material that it is acting on.
- 13 _____ is a measure of force per unit area within a body. It is a body's internal distribution of force per area that reacts to external applied loads.
- 15 _____ stress is a stress state where the stress is parallel or tangential to a face of the material.
- 16 Often described in terms of strain, _____ is a change in shape due to an applied force.
- 17 A _____ body is an idealization of a solid body of finite size in which deformation is neglected.
- 18 The slope of its stress-strain curve in the elastic deformation region, the elastic _____ describes an object's tendency to be deformed elastically under load.
- 19 The _____ point of a material is the stress at which a material begins to plastically deform.

DOWN

- 1 Shear _____ is defined as the ratio of shear stress to the shear strain.
- 2 The _____ modulus of a substance essentially measures the substance's resistance to uniform compression.
- 3 _____ is the resistance of an elastic body to deflection or deformation by an applied force.
- 4 _____'s modulus is a measure of the stiffness of a given material, also known as the tensile modulus.
- 5 _____ stress is stress that acts perpendicular to the face of the material, a compression or a tension.
- 6 _____ is a property of a material to undergo a non-reversible change of shape in response to an applied force.
- 8 _____ is a branch of physics which studies the properties of materials which deforms under stress, but then return to their original shape when the stress is removed.
- 9 _____ stress, or tension, is the stress state leading to expansion.
- 11 _____ is the geometrical expression of deformation caused by the action of stress on a physical body.
- 14 _____ strains produce dilations without a shape-change as such.