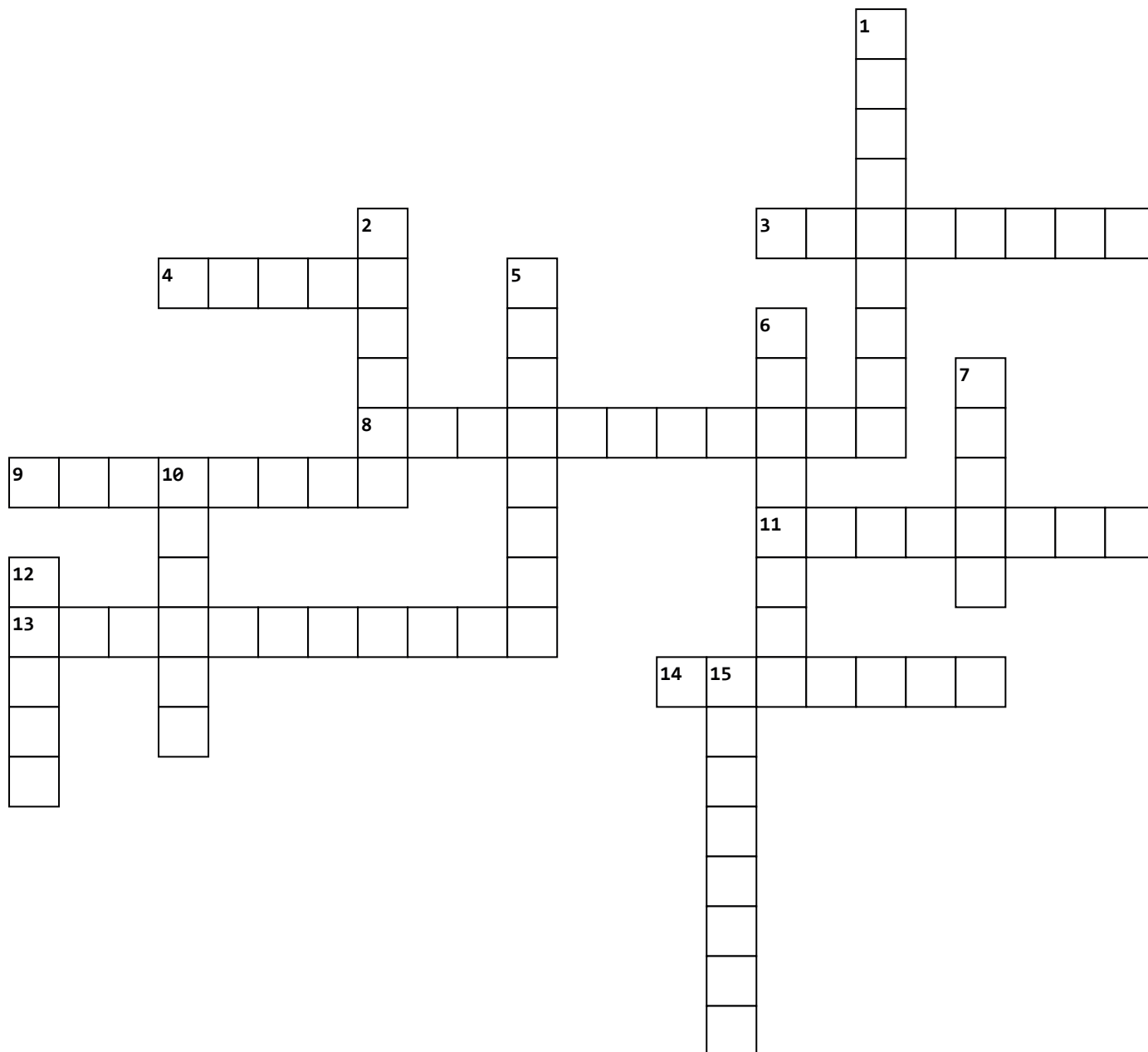


Stress and Failure Analysis



Across

- 3.** What type of material fails with little or no plastic deformation?
- 4.** strain, What is the angular change between two lines originally perpendicular?
- 8.** What is the property of a material to retain deformation after load removal?
- 9.** What type of failure occurs due to repeated cyclic loading?
- 11.** What property is the ratio of stress to strain in elastic deformation?
- 13.** What phenomenon involves decrease in stress under constant strain?
- 14.** expansion, What effect causes a material to expand with rising temperature?

Down

- 1.** Which failure theory is used for ductile materials under complex loading?
- 2.** What time-dependent deformation occurs under constant load at high temperature?
- 5.** What kind of stress occurs when a shaft is twisted?
- 6.** strength, What is the maximum stress a material can withstand before failure?
- 7.** point, What is the point at which a material begins to deform plastically?
- 10.** loading, What type of loading occurs suddenly and with high force over short time?
- 12.** propagation, What does fracture mechanics study in materials?

15. law What fundamental law defines the linear relationship between stress and strain?