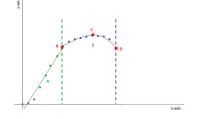


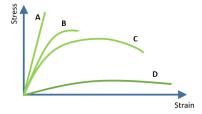
## Post-Activity Assessment Answer Key

- 1. Given the figure, what does the x-axis represent?
  - O stress
  - 🗘 strain



- 2. Given the same figure, what does the region A (between the origin and point B) represent?O ductile strength
  - O ductile str
  - O load
  - Young's Modulus
- 3. Given the same figure, what does point D represent?
  - **O** yield point
  - fracture point
  - $\mathbf{O}$  load
- 4. Given the same figure, what does point B represent?
  - **O** fracture point
  - O Young's Modulus
  - vield point
- 5. Given the same figure, if the *x*-axis represents *strain*, what does the *y*-axis represent?
  - ${\bf O}$  force
  - ${\bf O}$  displacement
  - 🗘 stress
- 6. Given the figure to the right, match the properties to the material:
  - D plastic
  - A brittle
  - B strong, but not ductile
  - C ductile
- 7. Force per unit area that results from a load applied to a material defines:
  - stress
  - $\mathbf{O} \ \text{strain}$

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- 8. Which is calculated by dividing the change in length of the material by the original length of the material?
  - ${\bf O}$  stress
  - 🗘 strain
- 9. What are the units for stress?
  - ♥ N/m<sup>2</sup>
  - $O \ Nm^2$
  - O N/m
  - $\mathbf{O}$  Nm
- 10. Which of the following factors does NOT affect the stress on a wire?
  - ${\bf O}\,$  diameter of the wire
  - original length of the wire
  - **O** load placed on the wire
  - ${\bf O}\$  cross-sectional area of the wire
- 11. Ceramics are brittle:
  - 🗘 True
  - O False
- 12. What is the best description of a stress-strain curve for ceramics?
  - **O** parabola opening up
  - 🗘 line
  - **O** parabola opening down
- 13. Ceramics are ductile:
  - $\mathbf{O}$  True
  - False