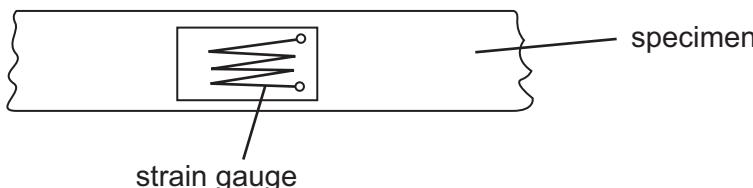


- 33 Tensile strain may be measured by the change in electrical resistance of a device called a strain gauge. A strain gauge consists of folded fine metal wire mounted on a flexible insulating backing sheet. The strain gauge is firmly attached to the specimen.



When the strain in the specimen is increased, what happens to the resistance of the wire?

- A It decreases, because the length decreases and the cross-sectional area increases.
- B It decreases, because the length increases and the cross-sectional area decreases.
- C It increases, because the length decreases and the cross-sectional area increases.
- D It increases, because the length increases and the cross-sectional area decreases.