

Lesson 9 - Heat Transfer by Conduction

Insulators and Conductors

Most metals are excellent heat conductors (thermal energy easily passes through them). Copper was the best conductor of the metals we tested, but silver, gold and platinum are even better.

Other solids, however, are not very good at transferring thermal energy. These poor heat conductors are referred to as insulators. Some examples are glass, wood, styrofoam, pink insulation, goose down feathers, etc.. Most insulators are used to slow down the transfer of thermal energy (i.e. they are used to keep objects warm or cold for as long as possible) like in a house.

Conductors allow thermal energy to easily pass through them.

Insulators do not allow thermal energy to easily pass through them.