

Solar Oven - Day 1

Activity 1: Thermal Properties of Materials

Discuss with a shoulder partner and fill in the table below.

Property	Description	Heat transfer mechanism (conduction, convection or radiation?)	Examples of material that has high levels of this property	Examples of material that has low levels of this property
Absorptivity	How well a material absorbs radiation			
Conductivity	How well a material conducts heat			
Reflectivity	How well a material reflects radiation			

Activity 2: Elements of a Solar Oven

In groups, move from station to station. Complete your worksheet based on the information given at each station.

Component	Absorptivity (High / Low / NA)	Conductivity (High / Low / NA)	Reflectivity (High / Low / NA)
Reflector			
Insulator			
Cover			
Absorber plate			

Exit ticket - complete the following statement:

The _____ (reflector / insulator / cover / absorber plate) needs to have a _____
(high / medium / low) **reflectivity** because...