

AS 90943

Student 6

Question: How does clothing worn in cold weather retain body heat?

Fleece like merino and other fibres keep us warm because they are insulators. We lose heat from our bodies by three ways convection, conduction and radiation. Fleeces like merino or wool stop us losing heat. This keeps us alive.

These people can get cold because they can lose some heat through convection.

Convection is where heat is lost because hot air moves away from the hot body. This means you then get cold. Merino has pockets to stop this heat loss. (1) The air can't move so you keep warm.

Humans don't lose heat through radiation or conduction.