Winter Camping Science

In the winter, we think about these things when we head outdoors:

Conduction (touching something cold): Make sure that your sleeping bag is rated for winter camping, at least down to 20 degrees. You want to definitely bring a sleeping pad/mat to place between your sleeping bag and the cold ground. When winter camping, some people use two. You do not want that cold seeping into you.

Convection (a cold draft): Your sleeping bag should close tightly at the top, and may even have a "draft tube" to keep cold air from leaking in around the zipper. Some campers bring a fleece blanket to layer inside the bag, which provides extra warmth and reduces the amount of air inside the bag to heat.

Perspiration (sweat): A dry change of clothes before sleeping is an absolute must. Do not sleep in the clothes you wore all day. Even if you cannot feel it, perspiration has made those clothes slightly damp. Also, wear fleece, polyester or wool – these fabrics wick your perspiration away and leave you dry. Cotton long underwear or pajamas will get damp and chill you. You may already own some of the appropriate clothing – fleece pajama bottoms or Under Armor / Starter athletic clothing. Remember wool or fleece socks too!

Radiation: A hat is a must. We lose an amazing amount of heat through our heads. Capping off your head prevents this. Dressing in layers also helps prevent our bodies from losing heat. Wear a wool watch hat to pull down over your face and a neck gator up to your chin.

Respiration: Breathing in frigid air can cool you down too. Tents hold in no more than 5 degrees so if it is 35 outside it will be no more 40 in the tent. Tents also greatly reduce wind chill. A face mask, gator or scarf over the nose mouth can warm up the air you breathe. Snuggling down in your sleeping bag can also create a warmer pocket of air.