Grade 7 Science – Heat **Keeping it Comfortable in Canada**

Name: _____ Class:___ Date: _____

Answer the following Questions:

What is the Average Body Temperature of Human (in Celcius)? _____

What is the Average Room temperature (in Celsius)? _____

What is the Average Temperature outside during winter (in Celsius)? _____

What is the Average Temperature outside during summer (in Celsius)? _____

We have learned (and already probably knew), heat travels from an area of high heat to one of low heat. How do we keep our homes at a comfortable temperature with the temperature outside being very different?

Insulation on exterior walls. Heat source in winter (furnace (natural gas or electric) or a wood stove). In summer, we cool our homes with an air conditioner.

What are the different methods that people use to prevent the loss of a comfortable temperature of homes?

Looking at page 104 and 105 in the Nelson textbook, what are the sources of heat loss and the remedies?

Sources of Heat Loss	Remedies

In building material/construction, what is **R-Value**?

What are some good materials that are used to increase the R-value?

What are some materials and things that have been used together to increase R-value of an exterior house wall?

What are some problems that occur when your R-value is very high – R2000 homes?

After watching the NRCan video on R-2000 homes, what are some standards that create a certified R-2000 home?

When you are older and buy a house, how important is it for you to have a R-2000 certified house? Explain.