PHYSICS SAMPLE REVIEW QUESTIONS
CHAP 10,11 (HEAT)

How much warmer should you get by eating a jelly doughnut?

What's the difference between heat and temperature?

What is the end result of the second law of thermodynamics if the universe is one connected system?

How high would a 3000 kg ice cube have to fall from for all of its energy to make it melt?

What is specific heat?

What is the difference in heat energy between solids, liquids, gases?

What phase changes are cooling processes and why?

Why do you need more water and longer time to cook spaghetti in Denver?

Why does air cool down as it escapes from a diver's compressed air tank?

Why does a cup of hot water cooling never quite reach room temperature?

What does the rate of something cooling depend on? Why?

Describe at the microscopic level why energy transfer by heat moves from an object at high temperature to an object at low temperature.

How do you calculate the final temperature of coffee mixed with milk?

How much energy is required to evaporate 10 grams of water?

Describe the relationship between pressure, work and volume in a gas.

A balloon expanding quickly cools, while a balloon expanding slowly does not... Why?

Why is the specific heat of water so high?