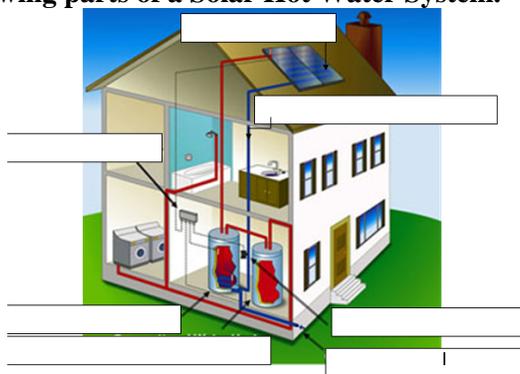


## Solar Thermal Hot Water Review Notes

1. Know the two main parts, and their functions, in the majority of Solar Thermal Hot Water Heating Systems.
2. Know what the most common solar collector type is? What does it look like?
3. What is an ACTIVE Solar Thermal Hot Water System?
4. What is a PASSIVE Solar Thermal Hot Water System?
5. Know the three main types of solar collectors used typically for residential applications.
6. Know what a DIRECT or “Open Loop” circulation system is.
7. Know what an INDIRECT or “Closed Loop” circulation system is.
8. Know what the “The Closed-loop Drain-back System” is.
9. Know what a Thermosyphon system is?
10. Typically, solar water heating technology is used to heat water to three temperature levels, know what each of those levels are used for.
11. Know the names of the following parts of a Solar Hot Water System.



12. Know how much of a home's total energy demand can be due to hot water consumption?
13. On average, know what the temperature is of unheated water entering a conventional hot water heater from a well or city water source is.
14. Know why it is important to have a back-up system.
15. Before you purchase and install a solar hot water heating system, know some things you may want to look into.
16. Sizing a residential solar water heater involves determining the total collector area and storage volume needed to meet what percentage of the household's hot water needs during the summer?
17. Know the maintenance of a solar hot water system.
18. Understand how to plug factors in the following equation to determine what size solar collector would be needed for a family in Michigan.  
*In Michigan, for the Solar Collector, contractors usually follow a guideline of about 20 square feet (2 square meters) of collector area for each of the first two family members. For every additional person, add 12 to 14 square feet (1.1 to 1.3 square meters). The Solar Storage Tank gallon size is determined by taking the size of the collector in square feet and multiplying it by 1.5.*
19. Understand the concepts of the solar hot water bag lab.