# Solar Water Heater Worksheet

**1. In the table below, record the water temperature as it moves through the solar water heater. Circle the ending temperature for each round.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Time | Round 1 | Round 2 | Round 3 | Round 4 |
| START |  |  |  |  |
| 30 seconds |  |  |  |  |
| 1 minute |  |  |  |  |
| 1 minute, 30 secs |  |  |  |  |
| 2 minutes |  |  |  |  |
| 2 minutes, 30 secs |  |  |  |  |
| 3 minutes |  |  |  |  |
| 3 minutes, 30 secs |  |  |  |  |
| 4 minutes |  |  |  |  |

**2. In the space below, graph the temperature of the water as it was warmed in the solar hot water heater.**

**Temperature**

**Time**

**3. In the space below, draw a picture of your solar water heater.   
Label the parts.**

**4. Why did you paint the tubing for your solar heater black?**

**5. How does lining the tube with foil help heat the water in your solar water heater?**

**6. What else might engineers consider when designing a water heater?**