

Name.....

Estimating the Time of Death

- 1) Plot the following body temperature measurements taken at 30 minute intervals on a murder victim. Using your graph, estimate the time of death. Assume a fairly even rate of temperature drop.

<b>Time</b>	<b>Temperature (°C)</b>
7.00 am	32.5
7.30 am	31.8
8.00 am	31.2
8.30 am	30.5
9.00 am	29.9
9.30 am	29.3

- 2) A forensic biologist takes temperature measurements on a body every 30 minutes to help determine the time of death. Using the data in the table below, estimate the time of death.

<b>Time</b>	<b>Temperature (°C)</b>
1.00 pm	29.7
1.30 pm	29.2
2.00 pm	28.6
2.30 pm	28.1
3.00 pm	27.7

What adjustments to the estimated time of death would need to be made under the following circumstances? In each case explain your answer.

- a) The body is found unclothed in August in Tasmania.
  
- b) The body is found lightly clothed next to an electric heater which is still operating.

3. (a) If a person died at 2.00am and his body temperature dropped by 0.9 degrees per hour, what would the body temperature be by 9.30am.

(b) Is it likely that the rate of heat loss would get faster or slower as time goes by? Explain your answer.

4. Why is it so important to get an accurate estimate of the time of death when someone has died under suspicious circumstances?