## Practice Test

Multiple Choice: Use the graph. Choose the correct answer for questions 1 and 2.

1. When was the temperature greatest?
A. 5 p.m.
B. 2 p.m.
C. 4 p.m.
D. 11 a.m.
2. Which is the best estimate for the temperature at $7 \mathrm{a} . \mathrm{m}$ ?
A. $18^{\circ} \mathrm{C}$
B. $20^{\circ} \mathrm{C}$
C. $22^{\circ} \mathrm{C}$
D. $25^{\circ} \mathrm{C}$

Temperature in Thunder Bay, June 24, 2005


Show your work for questions 3 to 6 .
3. Application Water exerts pressure on a scuba diver. The pressure is measured in units called kilopascals ( kPa ). The table shows the approximate pressure at different depths of sea water.
a) Graph the data. Draw a curve or line of best fit as

| Depth $(\mathbf{m})$ | Pressure $(\mathbf{k P a})$ |
| :---: | :---: |
| 5 | 150 |
| 10 | 200 |
| 15 | 250 |
| 20 | 300 |
| 25 | 350 | appropriate. Explain your choice.

b) At what depth is the pressure 225 kPa ? 400 kPa ?
c) What is the pressure at the surface of the water?
d) Describe the relationship between depth and pressure.
4. Knowledge and Understanding $A$ ball is dropped. The height it reaches after each bounce is measured.
The data are shown in the table.
a) Describe the trend in the data.

| Bounces | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Height (m) | 2.1 | 1.5 | 1 | 0.7 | 0.4 | 0.3 |

b) Graph the data. Draw a curve or line of best fit as appropriate. Explain your choice.
c) From what height do you think the ball was dropped? Explain your answer.
d) What else could you find out from the graph?
5. Thinking William and Rhiannon run 200 m . Describe each person's run. Who finishes first? Justify your answer.
6. Communication When you look at a graph, how can you tell if it represents a linear relation, a non-linear relation, or neither?
 Include diagrams in your answer.

