Name: Date:

# Sunrise and Sunset

**Purpose**:
How do the times of sunrise and sunset vary in your area throughout the year?

Sunrise and Sunset Data:
Universal Time at Greenwich Meridan
- Latitude: + 45

| Date | Sunrise am | Sunset pm |
|---|---|---|
| Apr 4 | 6:36 | 7:31 |
| 8 | 6:29 | 7:36 |
| 12 | 6:22 | 7:41 |
| 16 | 6:15 | 7:46 |
| 20 | 6:08 | 7:51 |
| 24 | 6:01 | 7:56 |
| 28 | 5:55 | 8:01 |
| May2 | 5:49 | 8:06 |
| 6 | 5:43 | 8:11 |
| 10 | 5:38 | 8:16 |
| 14 | 5:33 | 8:21 |
| 18 | 5:28 | 8:25 |
| 22 | 5:24 | 8:29 |
| 26 | 5:21 | 8:34 |
| 30 | 5:18 | 8:37 |
| June3 | 5:16 | 8:41 |
| 7 | 5:14 | 8:44 |
| 11 | 5:13 | 8:46 |
| 15 | 5:13 | 8:48 |
| 19 | 5:13 | 8:50 |
| 23 | 5:14 | 8:51 |
| 27 | 5:15 | 8:51 |
| July1 | 5:17 | 8:50 |

Information taken from:
Observer's Handbook 2003
Editor: Rajiv Gupta
The Royal Astronomical Society of Canada

**Procedure**:
- Plot the sunrise and sunset data on the graph paper provided.

**Analysis and Communication:**
Answer the following questions on a separate sheet of paper.

1. Describe the shape of the curve of the graph.
2. What is the shortest day of the year?
3. What is the longest day of the year?
4. Explain why the sunrise and sunset times change over the year.
5. How might the sunrise and sunset times be different for someone who is living:
   a. Further north (ex. + 55 latitude)
   b. Further south (ex. + 30 latitude)

Conclusion: