

## Daylight and the Iditarod Exemplar

Name: \_\_\_\_\_

Why does the Iditarod race begin in March and not January?

Winter solstice, December 21, has the least daylight of the year. After that, the days lengthen by 1 -3 minutes per day. The days from summer solstice, June 21 and the day with the most daylight, become shorter by 1-3 minutes per day. For this activity, we are going to use 1 minute for sunrise and 1 minute for sunset per day.

Your task is to find out the sunrise and sunset in our town on December 21<sup>st</sup>. You will also need to find the sunrise and sunset in Shaktoolik, Alaska, for December 21<sup>st</sup>.

December 21, our sunrise was \_\_\_\_\_AM. Sunset was \_\_\_\_\_PM.

December 21, Shaktoolik's sunrise was \_\_\_\_\_ AM. Sunset was \_\_\_\_\_ PM.

Mathematically, work out the sunrise and sunset in our town and in Shaktoolik, Alaska, one of the checkpoints on the Iditarod race for the date the race begins.

Write out your mathematical thinking. If you contrast the daylight of our town and Shaktoolik, what conclusion can you make?

The Iditarod race begins the first Saturday of March. Does the amount of daylight affect the race start date? What do you think? Have you discovered any facts to support your opinion?

