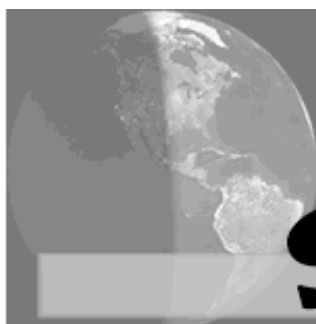




MYSTERY  
CLASS  
**SAMPLE**



## Longitude Clues Worksheet 2009 Example

Mystery Class #10

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

1. **FACT: Greenwich, England is at 0 degrees longitude.**

Mark the location of Greenwich, England on the map.

2. **FACT: The sunrise time is 06:03 A.M. (UT) in Greenwich, England on the spring equinox** (March 20, 2009). Write the sunrise time beside 0 degrees longitude on the map.

3. The sunrise time is 12:09 (UT) on 3/20 (date) at this Mystery Class location on the spring equinox. (Look this up on Equinox Sunrise Table.)

4. The difference between UT sunrise time at this Mystery Class and UT sunrise time at Greenwich, England is 6 hours and 06 minutes.

(**CAUTION!** Remember that hours and minutes are not in decimal form, and pay attention to the date of the UT sunrise time too. This may not be a simple subtraction or addition equation for your Mystery Class site. Think about your answer!)

5. **FACT: The Earth turns to the east as it spins.**

The Earth will spin for 366 minutes between the sunrise time at Greenwich and the sunrise time at this Mystery Class location.

(Clue: convert your answer in #4 above to minutes.)

6. **FACT: The Earth spins 1 degree longitude every 4 minutes.**

I estimate the longitude of this Mystery Class to be 91.5 degrees away from Greenwich.

7. This Mystery Class is West (East or West) of Greenwich.