

## Activities: Map and Compass

### Determining General Directions

Modified with permission from *Outdoor Living Skills Series: Map and Compass*, Missouri Department of Conservation

#### Overview:

Students use the sun and stars to determine general directions.

#### Associated Objectives:

- ❑ Students will become familiar with navigational tools (map and compass) and demonstrate their ability to use them to navigate successfully.

#### Time:

One 30 – 60 minute session

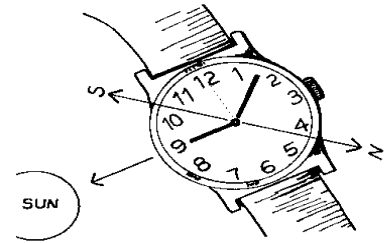
#### Materials:

Analog watch (Part 1)

#### Part 1 (A Watch as a Compass)

##### Directions:

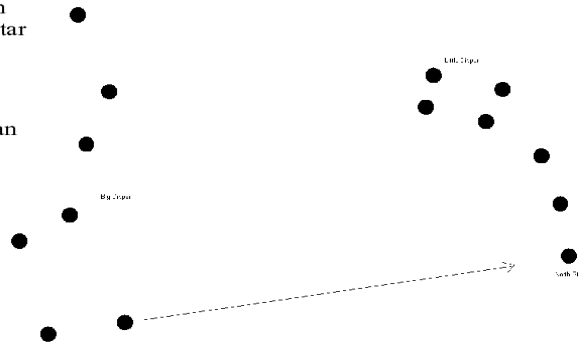
Hold an analog watch horizontally with the hour hand pointing toward the sun. South is mid-way between the hour hand and the number twelve going the shortest way around the face of the watch. Notes: The watch must be set to standard time for the time zone you are in. This method works between 6 a.m. and 6 p.m. on a sunny day, but is not very reliable if the sun is high.



#### Part 2 (Finding the North Star)

##### Directions:

Use the stars to determine north on a clear night. Imagine a line extending from the bottom edge of the “pan” of the Big Dipper to the tail star (end of the handle) of the Little Dipper. This is Polaris, the North Star.



##### Evaluation:

Students will be able to determine south using an analog watch on a sunny day and north using Polaris on a clear night.

##### Extension:

Research and/or construct a sundial.  
Research and learn to locate additional stellar objects used in navigation.