



ROAD SCHOLAR

10/13 presented

Read the General Rules in the manuals and on www.soinc.org as they apply to every event.

- DESCRIPTION:** Participants will respond to interpretive questions that may use one or more state highway maps, USGS topographic maps, internet-generated maps, a road atlas or satellite/aerial images.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 50 Minutes

- EVENT PARAMETERS:** Participants must bring a protractor, ruler, and may bring a USGS Map Symbol Sheet, a calculator, notes, reference materials, and other measuring devices. Computers are not permitted. The event supervisor will provide all required maps, question booklets, and response sheets.
- THE COMPETITION:** The highway and quad maps may be from one or more states. The event may be presented in a storyline format. Participants may be asked to draw map features located within a one square mile (1-mile x 1-mile) section using the correct features listed in 3.c. This square will be included on the answer sheet. Participants may not write on the maps.

a. Topographic Map Testing Areas

- Map location/series/scale/index/legend
- Marginal information
- Contours
- Magnetic declination
- Map symbols
- Map features
- Survey control marks (control stations and spot elevations)
- Azimuths and bearings
- *Stream gradient (feet per 1000 feet)



- Distance values between features (both English and metric units)
- Geographic coordinate system features and symbols (degrees, minutes, seconds)
- Public Land Survey System (PLSS)
- Elevation of features and symbols
- *Slope (feet per 100 feet)
- Sector Reference System
- Direction of stream flow
- *Profiles
- Graticule tick marks
- *Universal Transversal Mercator (UTM)

b. Highway Map Testing Areas

- Distances between features
- Map legend/tables/index
- Map grid system
- Map symbols
- City/Regional inserts on the highway map

c. Student-Created Map Design

- Map scales
- USGS topographic map symbol
- Distances
- Azimuths and bearings
- Public Land Survey System

* Items marked with an asterisk should be written at an introductory level for regional exams.

- SCORING:** Teams will be ranked according to their point total. Values of questions may be weighted. Ties will be broken by the accuracy and/or quality of answers to pre-selected questions.

Recommended Resources: All reference and training resources including the **Road Scholar/Map Reading Coaches Manual** are available on the Official Science Olympiad Store or Website at <http://www.soinc.org>

usgs.gov

Jackson quad map
Clements map

Calif State Map
Gold Country Map

- * let Annie know if you would like copy of Dick's CD
- * may bring topographic map in
- * don't fold map/reverse roll is better