

Road Scholar Contest Preparation Helpful Information

Contest Preparation Considerations

Class attendance: expectations should be explained at start of program
Student commitment: mandatory except for unusual circumstances (e.g., illness)
Need for weekend sessions (depending on coaches' availability and school's permission)
Students should take notes and/or coaches should provide handouts (maybe a journal)
What topics should be covered, and in what order (logical flow)
Class schedule: allow enough time to cover adequately all topics
During school day (special class) or after school
Each student should be looking at the same maps (easier to point out features, and so on)
May need to cancel sessions (special activities, snow days); allow adequate time
Coordination among coaches (divide up topics among coaches; variety in presentations)
Time delay in obtaining maps
Area covered by maps (enough features to practice PLSS, bearings, and so forth)
Up to two teams may compete, but alternates should be available
Student selection (volunteer, math/science test scores, intra-school competition)

Recommended Study Materials

State-Issued State Highway Map (Official Highway Map)
USGS Quadrangle map (7.5-minute series)
USGS Quadrangle map (15-minute series)
Topographic symbol sheet
Ruler
Protractor

Useful Websites

http://www.soinc.org	Science Olympiad homepage
http://www.missouri.olympiad.edu	Mo. Science Olympiad homepage
http://mcmweb.er.usgs.gov/topomaps	USGS sites for ordering topographic maps
http://ngmdb.usgs.gov	
http://store.usgs.gov (1-888-ASK-USGS)	
http://geology.isu.edu/geostac/Field_Exercise/topomaps/index.htm	On-line tutorial about various aspects of maps, but useful
http://academic.brooklyn.cuny.edu/geology/leveson/core/linksa/profile.html	Construction of profiles from contour plots
http://academic.brooklyn.cuny.edu/geology/leveson/core/linksa/comp.html	Azimuths, bearings, and their interrelationships
http://academic.brooklyn.cuny.edu/geology/leveson/core/linksa/maptop.html	Excellent website by Prof. David Leveson of Brooklyn College, CUNY (New York) containing informational links about azimuths, bearings, contours, gradients, and profiles
http://www.utexas.edu/depts/grg/huebner/grg312/lect23.html	History of PLSS
http://www.dnr.state.wi.us/org/land/forestry/Private/PLSStut/plsstut1.htm	Step-by-step tutorial on PLSS
http://www.fairview-industries.com/gismodule/PartOne.html	History and description of PLSS; includes information on metes-and-bounds