

# 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

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