

## 2019 Road Scholar Equipment

### COLORED PENCILS/PENS

For 2019, the Road Scholar rules were amended to require “colored marking devices” in paragraph 2. a.. These are required to accomplish the Student-Created Map with the correct symbols and colors called for in paragraph 3. c. ii.. A review of the USGS Topographic Map Symbols sheet will tell you that six colors are needed. They are:

black (the pencil/pen you use on the test) for boundaries and some roads and numerous map symbols including gray,  
light green for vegetation,  
blue for water features,  
brown for elevation contours and some ground symbols,  
red for some boundaries, roads and symbols, and  
reddish orange for some boundaries and symbols.

You will already have the black pencil or pen, and the remaining five pencils or pens should not be hard to come by. Crayola and Sargent both have fairly cheap twelve packs that include the required colors. Or check around home. You will want to check the actual colors on paper against the Topo Symbols sheet since some pencil colors are closer to the correct colors than others.

### OTHER EQUIPMENT

Other equipment you may find useful in addition to a ruler, protractor and calculator are a magnifying glass, a UTM template and a PLSS template. We also find it useful to have a long (18-24”) strip of paper, for measuring long distances on a map. At least one edge needs to be carefully cut to be very straight since you will use it as a straight edge for measuring distances and azimuths that require a longer line than a 305 mm/12” ruler provides, and also to capture contour and distance data for topographic profiles.

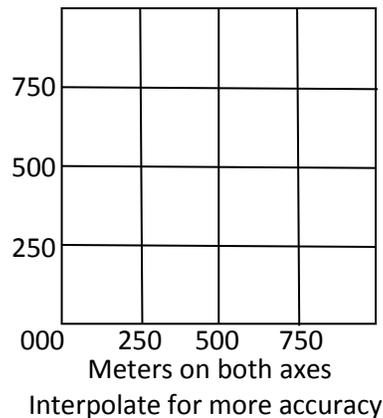
Accurate UTM and PLSS templates can be purchased inexpensively (\$4-\$11) from vendors such as [maptools.com](http://maptools.com) or [searchgear.com](http://searchgear.com). Or you can use the two templates below. They are not as detailed as commercial templates, but all you need is a transparency sheet and a printer. Make sure the printer is set to reproduce exactly at 100%. To error check the printing, the PLSS template should be 67 mm square and the UTM template 41.7 mm square.

**PLSS**

NW ¼, NW ¼	NE ¼, NW ¼	NW ¼, NE ¼	NE ¼, NE ¼
SW ¼, NW ¼	SE ¼, NW ¼	SW ¼, NE ¼	SE ¼, NE ¼
NW ¼, SW ¼	NE ¼, SW ¼	NW ¼, SE ¼	NE ¼, SE ¼
SW ¼, SW ¼	SE ¼, SW ¼	SW ¼, SE ¼	SE ¼, SE ¼

Interpolate for quarter-quarter-quarter sections

**UTM**



For questions, comments and suggestions, please contact Dan Haggarty [sciolydanh@yahoo.com](mailto:sciolydanh@yahoo.com)