8. Do you have a map showing Oklahoma's geologic faults?

We have no maps devoted specifically to faults, but the 1954 "Geologic Map of Oklahoma" (scale 1:500,000) shows many of the major faults.

Faults are also shown on larger-scale geologic maps of different parts of the State; these maps are published as parts of map series, bulletins, circulars, and guidebooks, many of which are available from the OGS Publication Sales Office (Appendix 1). Faults are shown on maps published by other geologic and scientific organizations and on maps included in unpublished master's theses and doctoral dissertations.

Some maps show subsurface faults—faults that never reached the surface or are covered by rocks that were deposited after movement on the fault.

9. How can I interpret this topographic map?

You may go to a public library and consult books about hiking, camping, orienteering, and outdoorsmanship. The USGS distributes two useful publications, both free, and the OGS also has one.

A good USGS leaflet is "Topographic Map Symbols": it briefly describes topographic maps and how to read them, and it lists and identifies the symbols that are used on the maps. "Topographic Mapping" is a booklet that describes how topographic maps are made (Fig. 2).

"Topographic Map Reading" by OGS geologist James R. Chaplin is a paper available in OGS Special Publication 96-5. A key feature of this paper is a discussion of all the information in the margins of a standard 7.5′ USGS topographic map—outside the map area (for example: names of adjoining quadrangles). Chaplin also describes the Land Office Grid System (also known as the section-township-range system), which is the basis of legal land descriptions in the State. This system of land subdivision appears on all the USGS 7.5′ topographic maps of Oklahoma (see question 12).

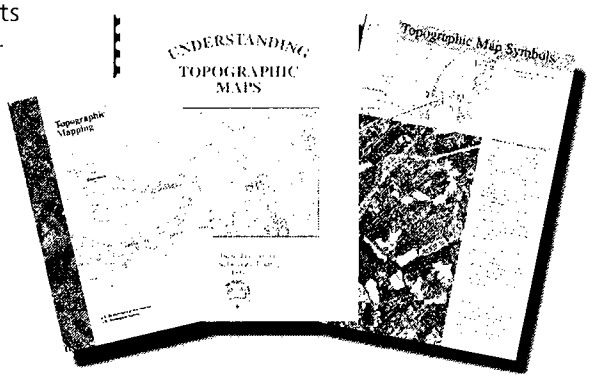

Figure 2 *(question 9)*. Three free or low-cost publications that describe how to interpret topographic maps.

10. I've been wondering about an Oklahoma place name. How do I find where the place is?

Write or call us with the name, and we'll look it up in the USGS Geographic Names Information System.

Many geographic and cultural features such as creeks, mountains, cemeteries, and towns throughout Oklahoma have formal names. In some cases, features in different counties have the same name; for example, there are five streams named Thompson Creek in Oklahoma.

You may call the OGS or consult the USGS website (Appendix 2), where a list of all officially named features is maintained. This website can be used to determine the feature's latitude and longitude, identify what topographic map shows the feature, and display on your computer monitor a map showing the feature.

11. Where is the nearest bench mark?

On a USGS topographic map of your area, look for points marked "B.M."

Several types of location markers are referred to as bench marks. The American Society of Civil Engineers defines a bench mark as "a relatively permanent material object, natural or artificial, bearing a marked point whose elevation above or below an adopted datum is known." On maps, bench marks generally are marked "B.M.," but some maps show permanent bench marks as P.B.M. and temporary bench marks as T.B.M.