

# **Project Title: Geology**

## **Description:**

Geology involves studying the earth's crust, its layers, and their history. Youth learn to identify Indiana rocks, minerals, and fossils.

## **State Fair Entries:**

3 per county; one per level

## **Exhibit Guidelines:**

Artificial Intelligence (AI) may be used, with parent permission, when creating this exhibit and is to be documented as a reference. A majority of the work to create this exhibit is to be the 4-H member's original work. All posters, notebooks, and display boards must include a reference list indicating where information was obtained, giving credit to the original author, to complete the 4-H member's exhibit. This reference list should/might include web site links, people and professionals interviewed, books, magazines, etc. It is recommended this reference list be attached to the back of a poster or display board, be the last page of a notebook, or included as part of the display visible to the public. A judge is not to discredit an exhibit for the way references are listed.

Posters are to be 22"x28" and displayed horizontally and placed in a clear plastic sleeve or covered with clear plastic to protect contents. The poster must be mounted on a firm backing to add stiffness to the exhibit, for example: a foam core board. Display boards should be designed to sit on a table using no more than 36" of tabletop space. Space should be left in the lower right-hand corner to place an exhibit tag provided by Purdue Extension staff.

Specimens may also be displayed in a collection box no larger than 24"x 18"x 3", displayed horizontally.

You may purchase your specimens and may display rocks, fossils, and minerals. If you purchase a specimen, indicate when and where you purchased it and the location where you would expect to find the specimen. If you collect a specimen, indicate the county and township where you found it.

Posters and display boxes will be exhibited "standing up" at the Indiana State Fair. Therefore, you need to mount your specimens securely. Subject matter experts suggest the following methods: soaking 1/2 cotton ball in Elmer's glue, hot glue, or clear tub sealant. Place the cotton ball in your box and put your rock (or fossil or mineral) on the cotton ball and let sit. It will take 1-2 weeks for Elmer's glue to fully harden. Specimens mounted with Elmer's glue can be removed by soaking the cotton ball in water. Glue remaining on the rock may be brushed off with an old, damp toothbrush.

When exhibiting rocks show a fresh surface (recently cracked or broken surface) to help judges identify the rock.

Labels - Include the specific geographical location where you would expect to find any specimens as well as where you actually acquired it (found, purchased, etc.).

Do not identify your specimens any further than phylum and class. There is one exception to this for fossils which are identified to phylum OR class. Class should only be used for fossils of mollusks, backboned animals, and arthropods.

Judges evaluating exhibits should recognize individual differences and creativity, therefore using information in this document as a guide rather than a requirement.

## Exhibit Class Guidelines:

### *Beginner (grades 3-5 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate.

### *Intermediate (grades 6-8 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 8-16 minerals and/or fossils.

### *Advanced (grades 9-12 suggested)*

Create an educational poster, notebook or display about any manual activity or on any geology topic of choice that is age/grade appropriate, or collection of 15-25 minerals and/or fossils and/or jewel stones. Youth can also design and complete an independent study activity.