

# 4-H GEOLOGY

## 1. READ GENERAL RULES AND REGULATIONS.

- The exhibit box should be 18" x 24" x 3 ½ inches high. Plexiglas covers are required. Boxes with glass covers WILL NOT be accepted. All specimens are to be arranged across the narrow (18") dimension of the exhibit box, making the exhibit 18" across the top and 24" deep exactly. If a box has a sliding Plexiglas cover, it must be removable from the top. Screws, locks, or other devices that would prevent the removal of the cover should not be used.
- Each exhibitor is required to identify each display box by placing an identification label bearing name, club and number of specimens in the upper left hand corner of the Plexiglas cover (inside-use clear double-sided tape to adhere gummed labels), and by attaching a label with the same information on the lower right corner of the box (outside). The inside label is to also indicate the class number.
- An Exhibitor may enter in both geology and lapidary classes. Exhibitor may show in only one of the first four geology classes (419001, 419002, 419003, or 419004). Exhibitor may also show in geology class 419101 (Educational Exhibit), 419201 (Mineralogy), and in one lapidary class.
- Geology specimens should be labeled with the number of specimen, date collected, specimen name or description, and locality (county only) where collected.
- Specimens should be mounted in the box by proper groups: rocks, minerals, fossils. Fossils must be identified to Phylum, Class and Genus level. Genus name is to begin with a capital letter. Species name is all lower case. Genus and species names must be either italicized or underlined, not both. The words "phylum, class, genus" on labels are to be spelled out, not abbreviated. More than one specimen of the same kind of rock or mineral or species of fossil may be exhibited if this duplication represents different geological formations. Specimen label must show this distinction (Fort Hays Limestone, not just limestone; calcite from the Greenhorn Formation, not just calcite; Phylum: Brachiopoda Class: Articulata Genus: Composita from the Morrill Limestone Member, not just Phylum: Brachiopoda Class: Articulata Genus: Composita).
- For classes 419001-419004, ALL specimens MUST be collected by the participant (not purchased) from locations in Kansas, with the exception of Tri-State Mining Area specimens collected from these three adjacent counties: Ottawa County, OK; Newton and Jasper Counties, MO. OTHER OUT-OF-STATE SPECIMENS WILL NOT COUNT IN THE MINIMUM NUMBER FOR THE CLASS, NOR WILL THEY BE CONSIDERED IN THE JUDGING.

## **AWARDS:**

### **Overall Grand Champion Geology Trophy**

Sponsored by Stafford County 4-H Council, St. John, KS

## **CLASS:**

**419001—Geology Collection:** Display at least 15 different rocks, minerals or fossils collected during current 4-H year. Limited to one exhibit box (See #2). Only those exhibiting for the first time may enter this class.

**419002—Beginning Geology:** Display at least 30 different rocks, minerals or fossils, at least 5 of each. Fifteen must be collected during the current 4-H year. Limited to one exhibit box (See #2). This class is open to those exhibiting either first or second time at the Fair.

**419003—Intermediate Geology:** Display at least 45 rocks, minerals or fossils, at least 5 of each. Fifteen must be collected during the current 4-H year. Exhibit limited to two exhibit boxes (See #2).

Identify rocks as igneous, metamorphic, or sedimentary. These rock types must be spelled out on labels or have a legible key. This class is open to those exhibiting either the third or fourth time at the Fair.

**419004—Advanced Geology:** Display at least 60 rocks, minerals, or fossils, at least 5 of each. Fifteen must be collected during the current 4-H year. Exhibit limited to two exhibit boxes (See #2). Identify the rocks as igneous, metamorphic, or sedimentary. These rock types must be spelled out on labels or have a legible key. This class is open to those exhibiting the fifth time or more at the Fair.

**419101—Geology Educational Exhibit:** An exhibit relating geology to everyday living; or to a mineral test, a rock formation, geological history, species of a fossil, forms of one mineral, a variation of one kind of rock, archeological artifacts, or Indian artifacts. Digital formats are accepted. Please make arrangements for the judge to view your exhibit and have a hard copy for display. Exhibit limited to 4 feet of table space. Care should be taken to use durable materials that will withstand Fair conditions. Exhibitor can show in this class regardless of the number of times he or she has exhibited at the Fair or whether exhibitor has entries in geology classes. Exhibitor may also exhibit in lapidary class.

**419201—Mineralogy:** Display a minimum of 15 mineral specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. The minerals are to be grouped by mineral class (i.e. Carbonates, Oxides, Silicates) and at least 3 classes must be represented. The member must use one standard display box (See #2). The specimens must be labeled with the number of specimen, date collected, name of specimen, county where collected and chemical composition (i.e. CaCO<sub>3</sub> for calcite) if known.

## LAPIDARY CLASSES

- The lapidary classes will be judged on the following criteria: Workmanship and Content - 60 points, Presentation and Showmanship - 30 points, and Accuracy of Information - 10 points.
- For Lapidary Classes ONLY, the dimensions of the box should be appropriate for the display, but should not exceed 18" x 12" x 3 ½".
- All lapidary specimens should be labeled with the following information: Specimen Name, Place of Origin (country, state, or county: county required for Kansas specimens), Purchased or self-collected, Date lapidary treatment began, Date lapidary treatment completed (Treatment completed after the State Fair is considered a new year specimen).

**419101—Lapidary Collection:** Display at least 5 varieties of polished (tumbled) specimens and 5 varieties of unpolished specimens that have not yet received lapidary treatment. These do not have to be an example of "before and after," nor do they have to be self-collected. Locales must be identified. Only those exhibiting for the first time may enter this class.

**419102—Beginning Lapidary:** Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. There is no requirement that the 4-H'er collect any of these. Locales must be identified. Lapidary work should be done during the current 4-H year.

**419103—Intermediate Lapidary:** Display before-and-after examples of at least 6 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least two varieties should be collected from the native site by the 4-H'er, at least one of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.

**419105—Lapidary Treatment:** Exhibit at least 6 specimens that have not previously been exhibited, which have received lapidary treatment. Lapidary treatment may consist of polishing, and end, face, or flat lapping. Specimens must represent at least 3 different varieties and include at least three cabochons of any size or shape, only one of which may be free-formed. A cabochon is a style of cutting in which the stone forms a domed or curved convex surface. Three of the specimens must be mounted into jewelry findings.