

DEPARTMENT – BUILDING EXHIBITS

SECTION - 4-H GEOLOGY

(Must be enrolled in the Geology Project)

SPECIAL RULES

1. Read General Rules. Violation of any of the following rules may result in disqualification. All decisions will be made by a county agent and their decision is final.
2. The exhibit box must be 18" x 24" x 3½". Plexiglas covers are required. All specimens must 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 judges from removing the cover can not be used. For Lapidary Classes 3525-3529 only, the dimensions of the box should be appropriate for the display, but should not exceed 18"X24"x31/2".
3. Each exhibitor is required to identify each display box by placing identification label bearing name, county and number of specimens in the upper left-hand corner of the Plexiglas cover, and by attaching a label with the same information on the lower right corner of the box (outside).
4. An exhibitor may enter in both geology and lapidary classes. Exhibitors may show in only one of the first four geology classes (5200,5201, 5202 or 5203). Exhibitor may also show in geology class 5204 (special exhibit), 5205 Mineralogy, 5206 Fossils and in one Lapidary class.
5. All specimens must be collected in the state of Kansas (only exception see #7) during the current 4-H year, which will be allowed starting on the day after the conclusion of the State Fair. Geology specimens must be labeled with the number of specimens, date collected, specimen name or description and locality (county only) where collected.
6. For the geology classes 5200,5201,5203, specimens should be mounted in the box by proper groups: rocks, minerals, fossils. Fossils must be identified to the Phylum, Class and Genus level. (if possible, or part if Genus cannot be determined). The Genus specimen name is to begin with a capital letter. and the whole specimen's name must either be italicized or underlined, not both. Species name is not required however, if a species name is used it must be all lowercase and 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 a 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).
7. For geology classes 5200,5201,5202,5203,5205, 5206 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.

CLASSES - 5200: Geology – 15 rocks

Display at least 15 different rocks, minerals or fossils collected during the current 4-H year. Limited to one exhibit box. May only be exhibited at State Fair by first time St. Fair exhibitors.

5201: Geology – 30 rocks

Display at least 30 different rocks, minerals or fossils, at least 5 of each. At least 15 specimens must be collected during the current 4-H year. Limited to one exhibit box. Open to second and third time as state fair exhibitor.

5202: Geology – 45 rocks

Display at least 45 rocks, minerals or fossils, at least 5 of each. At least 15 specimens must be collected during the current 4-H year. Exhibit limited to two boxes. 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 either the fourth or fifth time at the fair.

5203: Geology – 60 rocks

Display at least 60 rocks, minerals, or fossils, at least 5 of each. At least fifteen must be collected during the current 4-H year. Exhibit limited to two boxes. 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 sixth time or more at the fair.

5204: Geology – Geology Educational Exhibit

Exhibit relating 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. List your sources used (example – web addresses or books reviewed as a citation list). Exhibit limited to 4 feet of table space. Care should be taken to use durable materials that will withstand Fair conditions. Exhibitor may show at State Fair in this class regardless of number of times he/she has exhibited at the fair or whether exhibitor has entries in classes 5200-5203. Exhibitor may also exhibit in lapidary class.

5205: 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. Member must use one standard display box. The specimens must be labeled with the number of the specimen, date collected, name of specimen, county where collected and chemical composition (i.e.: CaCO₃ for calcite) if known.

5206: Paleontology

Display a minimum of 15 fossil specimens collected by the participant in Kansas, at least 5 of which have been collected during the current 4-H year. The fossils are to be grouped by Phylum and Class, and at least 3 phyla must be represented (Brachiopoda, Chordata, Mollusca, etc.) The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen; date collected; county where collected; formation, member, or source; phylum, class, and genus or part; and geologic age (Cretaceous, Permian, Pennsylvanian, etc.) See #6 for additional fossil labeling expectations.

5207: Petrology

Display a minimum of 15 rock specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. Rocks are to be grouped by the 3 rock classes (Sedimentary, Igneous, and Metamorphic). You must display at least one specimen from each of the three classes. The specimens must fit in one standard display box (see #1). Specimen labels must include a specimen number, the date collected, name of specimen, and the county where collected. All rocks must be identified by the formation and member name (Examples: Fort Hays Limestone, Member of the Niobrara Chalk Formation) or source (Examples: Rocky Mountain Outwash, glacial till).

NOTE – Exhibitors wanting to move up classes sooner are allowed. These class suggestions encourage appropriate advancement in the project.

For Lapidary classes only, the dimensions of the box should be appropriate for the display but should not exceed 18" x 24" x 3½". The work (polishing/tumbling) must be done by the exhibitor as this is part of the learning process.

The lapidary will be judged on the following criteria:

Workmanship and Content -	60 points
Presentation and Showmanship -	30 points
Accuracy of Information -	10 points

All lapidary specimens must 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 State Fair will be considered a new year specimen.)

5300: Lapidary – 5 varieties polished 5 varieties unpolished

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”, not do they have to be self-collected. Locales must be identified. Only those exhibiting lapidary at the State Fair for the first time may exhibit in this class.

5301: Lapidary – Before and After (3 Varieties)

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 member collect any of these. Locales must be identified. Lapidary work must be done during the current 4-H year.

5302: Lapidary – Before and After (6 Varieties)

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 must be collected from the native site by the 4-H member, at least one of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties must be done during the current 4-H year.

5303: Lapidary – Before and After (9 Varieties)

Display before and after examples of at least 9 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least three varieties must be collected from the native site by the 4-H member, at least two of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties must be done during the current 4-H year.

5304: Lapidary – 6 specimens not exhibited before

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 top of the stone forms a domed or curved convex surface. Three of the specimens must be mounted into jewelry findings.

Special lapidary exhibits should be entered in class 5304. Please note that each member is limited to one entry in this class.

Geology Identification Kit (Not a State Fair Class)

A minimum of 6 geology identification aids packed in a container suitable to take on a geology field trip. Suggestions of suitable items are: magnifying glass, hardness tester, streak plate, identification books, etc. Not eligible for State Fair.

Beginner Small Specimen Box (Not a State Fair Class)

First or second time exhibitors only! (Recommended age 7-9) 12 different rocks, minerals and fossils displayed in an appropriate box of exhibitor's choice; minimum of 3 each of rocks, minerals and fossils; must be collected during current 4-H year. Not eligible for State Fair.