

## Instructions for Fossil Label

(see sample label at the end of the instructions.)

(Recommended type: Arial Regular 12 font; smaller font size may be used to save space)

### **1. Fossil Specimen #**

Sequential numbering of your specimen: 1, 2, 3, etc.

### **2. Common Name:**

Worth 1 point. Can be shell, tooth, plant, track, trail, etc.

### **3. Scientific Name:**

Worth 1 point. Use the scientific name that best fits your specimen, or your best attempt to identify your specimen. Fossils are scientifically classified, just like modern life, into kingdom, phylum, class, order, family, genus, and species. Some fossils are easily identified to different levels of classification, and beyond that level, classification is much harder. For example, many fossil seashells found in Kentucky are brachiopods.

Brachiopod is a phylum-level scientific classification. If that is the best you can identify the specimen, than use the word brachiopod on the label. Brachiopods can often be identified to the genera level relatively easily. You can use books, the Internet, and geologic maps to determine the common fossil genera near where you found your specimen. For example, the brachiopod genus *Rafinesquina* is common in central Kentucky. If that is the correct genus for your specimen, use that for the label. Do not use species names on your labels. Species are the most specific type of classification. Genera often have multiple species. For example *Rafinesquina alternata* and *Rafinesquina nasuta* are two brachiopods found in central Kentucky. The first word in each, *Rafinesquina*, is the genus name. The second word in each, *alternata* and *nasuta*, are the species names. Species-level identification often takes some expertise and attention to details of internal anatomy that are not present in all specimens and are beyond the scope of these collections. Caution: Many books and websites will have pictures of fossils with genus and species names. Just because your fossil looks like the picture in the book or on the web does not necessarily mean it is the same species. Use the genera name, but not the species name on your label.

You may not be able to get to a genera-level classification for your fossil. For example, crinoids are common Kentucky fossils. Crinoids are a type of echinoderm.

Echinodermata is the phylum; crinoidea is the class. There are many different crinoid genera. However, most genera can only be identified by a specific part of the crinoid, which is not the part most people find. Most people find the fossil ring- or bead-like pieces of the crinoid stalk. You can't tell a genera from just the beads, so class level is the best you could do.

### **4. Rock Unit/Type:**

Worth 1 point. In fossil identification and verification it is important to know the name of the rock unit a fossil came from. Rock units are mapped and labeled across the United States and the world. They are given group, formation, member, or bed names. If you know or can easily find out the name of the rock unit your fossil came from, list it here.

The entire state of Kentucky has been geologically mapped, and maps are available online at the Kentucky Geological Survey website. You can zoom to the location in which a fossil was found and identify the rock unit. For example, Lexington Limestone. If the unit name is not available, or you are unsure of the unit your sample came from, then do your best to identify the rock type in which your specimen was found, such as limestone, shale, or sandstone.

## 5. Source:

Worth 1 point. First, provide information about the source of your specimen. Either underline Found, Purchased, or Gift, or delete the two sources that do not apply. Second, in the space below, provide a short description of your specimen under each category, as shown in the following examples. You may want to choose a smaller font size or let the Word program insert another line as you type. An extra point will be awarded for specimens that were found (read the Geology Division (6028), 14 c for more details and read the specifications that are written for each of the classes). Also read below on how to address your labels.

### a. Found Purchased Gift

If you found your specimen, then provide brief information about where you found it.

1. Where you found it (for example: back yard or quarry or outcrop or landscaping, etc.).
2. Location (City, State or City, Country).

### b. Found Purchased Gift

If you purchased your specimen, then provide brief information about where you purchased it, and if available, more information about where the specimen originally came from (where the store or shop found it). For example, you may have bought the specimen from a store in Lexington, Kentucky, but the specimen was originally collected in Arizona. Knowing where the specimen is originally from is an important part of fossil collecting.

1. Where it was purchased (for example: rock shop or landscape shop or Internet purchase, etc.).  
Provide the original location of your specimen (many purchased specimens will list where the specimen was originally found) (City, State. or City, Country).

### c. Found Purchased Gift

If you were given the specimen by someone else, then provide brief information about how you got it.

1. Who gave you the specimen (for example: from friend or from grandmother).  
If the person who gave you the specimen bought it on a trip and knows where it was bought, then fill out a Purchased label as instructed. If the person who gave you the specimen found it, answer the next question.

2. Ask the person who gave you the specimen to provide you with a location, or if the location is not known, then narrow down a possible location. For example: Grandmother bought it or found in (City, State or City, Country).

## 6. Geologic age:

Worth 1 point. What is the geologic period(s) or system(s) that this particular fossil is from. For example Ordovician, Silurian, Devonian, etc. For Kentucky fossils, you can use the online map at the Kentucky Geological Survey website to determine the rock unit name and then the geologic system. Most specimens that are purchased will have the age on the label. If the sample is not from Kentucky or was given to you from somewhere else, you may need to look up the fossil name to see in which system the fossil is commonly found.

### Fossil Label Example

Notes in brackets < > are for your understanding, not to be placed on the label.

#### **Fossil specimen #1**

**Common name:** Seashell

**Scientific name:** Brachiopod

<Note: This is a phylum-level name>

**Rock unit/type:** Clays Ferry Formation

**Source:** Found **Purchased** **Gift**

Route 25, Lexington, Kentucky

or

**Source:** Found Purchased **Gift**

Falls of the Ohio State Park,

Originally from Carrollton, Kentucky

or

**Source:** Found **Purchased** Gift

From friend from Dry Dredgers,

Originally from Brooksville, Indiana

**Geologic age:** Ordovician

#### **Fossil specimen #2**

**Common name:** Seashell

**Scientific name:** *Sowerbyella*

<Note: This is a genera-level

name>

**Rock unit/type:** Limestone, unknown unit

**Source:** Found **Purchased** **Gift**

Route 25, Lexington, Kentucky

or

**Source:** Found Purchased **Gift**

Falls of the Ohio State Park,

Originally from Carrollton, Kentucky

or

**Source: Found Purchased Gift**

From friend from Dry Dredgers,

Originally from Brooksville, Indiana

**Geologic age:** Ordovician