

| Animal | 1 |
| :---: | :---: |
| Echinoderms | $2$ |
| Asteroidea | 3 |
| Forcipulatida | 4 |
| Asteriidae | 5 |
| Asterias | 6 |
| Asterias Amurensis <br> (Northern Pacific starfish or seastar) | 7 |


|  | Animal | 1 |
| :---: | :---: | :---: |
|  | Chordates | 2 |
|  | Mammals | 3 |
|  | Carnivores | 4 |
|  | Canidae | 5 |
|  | Canis | 6 |
|  | Canis lupis Familiaris (domestic dog) | 7 |





Instructions: Print on cardstock, laminate, and cut cards apart. You may want to code the backs of cards to keep them together-for instance, a blue sticker on the back of each "dog" card, a red sticker on the back of each "cat" card, etc. It's also helpful to store each animal in a separate envelope.

This material is for ages 9-12. Before doing this work, the child should have completed:
All "Parts of" Zoology Cards
All "Types of" Zoology Cards
Vertebrate Sorting
Characteristics of Vertebrates
Vertebrate \& Invertebrate Sorting
The Animal Kingdom Chart \& Nomenclature
The traditional way to introduce this work is with nesting boxes (boxes that fit inside each other, each smaller than the next), or nesting dolls. You can find nesting boxes at the Container Store (or their website), and nesting dolls on eBay. You will need 7 boxes or dolls.

The largest box or doll represents the kingdom, in this case, the Animal Kingdom. After that they go in descending order to the species.

To present this material:
Show the child one of the "species" cards, something familiar like the dog or cat. Say, "We know this is a dog. But we want to know more about this dog. With these [dolls or boxes], we can find out exactly where this dog belongs on the Animal Kingdom Chart.

As the child places the boxes or dolls in order from largest to smallest, they should also put out the first set of cards which shows the categories (Kingdom, Phylum, Class, Order, etc)

After that, they can take the cards for the first animal and put them in order and then do that for the rest of the animals.

Notes:
This material gets its name from the nesting dolls that were first produced in China.
The Animal Kingdom has far more than 7 levels of division (called taxonomic ranks). As a matter of fact, including things like superphylum, subphylum, superfamilies, subfamilies, etc. for each category, a given animal could have up to 35 levels of taxonomic ranks.

Obviously that level of study is very detailed, and since this is an introduction to taxonomic classification, we have kept the levels to 7-the seven specified by the International Code of Zoological Nomenclature as main taxonomic ranks. Sometimes "Domain" (above Kingdom) and "Breed" (below Species) are included when ranking animals, but those are not specified in the nomenclature code as a main taxonomic ranks.

Any child who shows interest in learning more can pick other animals and investigate their taxonomy. Generally you can Google the animal name and find websites that list its classification.

