

The store represents planet Earth and all the lifeforms living on our planet.



Your goal is to find out where your "species" (item selected) fits into this great big store.







STORE MAP (Kingdoms)

The different <u>departments</u> in the store represent the different **Kingdoms** of Earth.

For example, the food department could represent the Plant **Kingdom** and the Clothing could represent the Animal **Kingdom**.

When scientists find a new **species**, they must decide where to put that species so that it makes sense.

They would start by choosing what **Kingdom** it would go in.

For example, if it is a plant, it would go in the plant Kingdom, and animal in the Animal Kingdom.

Look at your item.

What **Kingdom**/store department would you find your item?







The Store Department (Phylum)

Once a scientist decides what **Kingdom** the new **species** should go in, then they must pick a **Phylum**. For example, Humans are in the Animal **Kingdom** and the **Phylum** Chordata. The **Phylum** Chordata also contains fish, reptiles, and birds.

There are millions of **species** in the same **Phylum**, just like there are hundreds of different kinds of food in the large food department.

Where do you think your item would go?

- Dairy
- Frozen Food
- Paper Goods and Chemicals
- Grocery
- Meat
- Produce
- Deli
- Bakery









Frozen Foods

er Goods & Chemicals

Rows within the Department (Classes)



Next, we must break the **Phyla** into smaller groups called **Classes**. **Classes** are like the rows we might find in the grocery area of the store. **Classes** have lots of similar things but they still very different in looks. Humans are in the Mammalia class, with animals like: whales, horses, and tigers.

In what row/class do you think you might find your item?

- Bread aisle
- Candy aisle
- Can goods aisle
- Pasta/rice aisle
- Baking aisle
- Coffee/tea aisle
- Juice/soda aisle
- Breakfast foods aisle
- Sauce/salad dressing aisle







Shelves in the row (Order)

Humans look very different from whales or tigers, so to keep all those mammals straight we need to keep breaking our groups down.



The next group is called **Orders**.

Orders are like the **shelves** in the aisle that have similar kinds of foods.

In our **breakfast food aisle**, we might find things like pop tarts, Cream of Wheat, maple syrup, cereal and more.

As humans we are in the **Order Primates**. There are over 300 **species** of Primates. Even though all Primates have things in common they still don't look exactly alike.

With which of the following will you find your item?

- Oats
- Pop Tarts
- Breakfast Bars
- Pancake syrup
- Cream of Wheat
- Cereal





Cereal Brands (Families)



Orders are broken down into Families.

This is like all the brands of cereal that one company might make.

For example, Kellogg's makes both Raisin Bran and Fruit Loops. They are not the same, but they are from the same family (or company).

Humans are in the Family Hominidae.

To which order do you think your species belong?

- Kellogg's
- Quaker
- General Mills
- Post
- Great Value







Cheerios Flavors (Genus)



Once a scientist figures out which **family** the **species** belong in, then they can decide the **Genus**. The **Genus** is part of the specific name of the **species**, similar to our last name, which ties us to our family.

In our example, the Genus is Cheerios, but which kind?

What is your Species name?

- Honeynut
- Frosted
- AppleCinnamon
- Veryberry
- Chocolate







Our item (Species)

Our Species is: "Cheerios chocolate"

When naming a **species** scientist use <u>Binomial Naming</u>, the **Genus** is first part of the name and it is capitalized, followed by the **species** name, which is not capitalized.



Congratulations you have classified your species!







Our Species is: "Cheerios honeynut"

When naming a **species** scientist use <u>Binomial Naming</u>, the **Genus** is first part of the name and it is capitalized, followed by the **species** name, which is not capitalized.



Congratulations you have classified your species!

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Our Species is: "Cheerios frosted"

When naming a **species** scientist use <u>Binomial Naming</u>, the **Genus** is first part of the name and it is capitalized, followed by the **species** name, which is not capitalized.



Congratulations you have classified your species!

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Our Species is: "Cheerios applecinnamon"

When naming a **species** scientist use <u>Binomial Naming</u>, the **Genus** is first part of the name and it is capitalized, followed by the **species** name, which is not capitalized.



Congratulations you have classified your species!







Our Species is: "Cheerios veryberry"

When naming a **species** scientist use <u>Binomial Naming</u>, the **Genus** is first part of the name and it is capitalized, followed by the **species** name, which is not capitalized.



Congratulations you have classified your species!





















































Human Classification

KINGDOM Animalia
PHYLUM Chordata
CLASS Mammalia
ORDER Primata
FAMILY Hominidae
GENUS Homo
SPECIES sapiens

In our store example our species was **Kingdom**: Food, **Phylum**: Grocery, **Class**: Breakfast Foods, **Order**: Cereal, **Family**: General Mills, **Genus**: Cheerio's and **Species**: Flavor of Cheerios.

Keeping Precious Creatures Organized For Grumpy Scientists!

K-Kingdom P-Phylum C-Class O-Order F-Family G-Genus S-Species gallia.osu.edu



