TAMPA BAY WATCH

Kids' pages

Are you ready to learn about the bay?

News for the kids of Tampa Bay!

Winter 2018-19

TAMPA BAY WATCH
Restoring the Bay Every Day

In This Issue:

- Learn How Animals are Named!
- Mark your Calendar: Coastal Cleanup
- Meet and Greet: Festive Friends
- Valentine's Fun Facts
- Fun Activity: Valentine's Fish

Mark your Calendars!

GREAT AMERICAN CLEANUP

MARCH 16, 2019

The Great American Cleanup is Saturday, March 16 from 9 am - Noon at several sites in Pinellas County.

Visit tampabaywatch.org/volunteer to register your family!

Got a Question? Ask a Scientist!

Q I love the ocean! Can the ocean be my valentine?

A The ocean would make a great valentine! There are many ocean animals that are always in the Valentine's Day spirit! The pink anemone, flamefish, red porgy, polka-dot ribbonfish, pink candy crab, rose coral, and the cuttlefish, to name a few! How do these animals get these festive names?

Carl Linnaeus, a Swedish scientist born in 1707, created a simple, standard way to classify and name organisms. Because of this, Carl Linnaeus is known as the "Father of Taxonomy." (**Taxonomy** is the science of how living things are grouped, classified, and named.) Before Linnaeus, many biologists gave animals long, complicated, and unreliable names. Two scientists could be calling the same organism by two different names—you can imagine how confusing this could be! Linnaeus wanted to stop this confusion and developed the naming system we still use today!

Taxonomy at its most basic level is **sorting.** Linnaeus ultimately sorted organisms into different levels: kingdom, phylum, class, order, family, genus, and species. The organisms are sorted into these different levels based on characteristics about them: their size, shape, and structure. Imagine that each is a part of an upside-down pyramid; every level tells you a little more about an organism. The categories range from really large and broad—containing many different organisms—all the way down to the double name, or scientific name, which describes the distinct name of a specific organism.

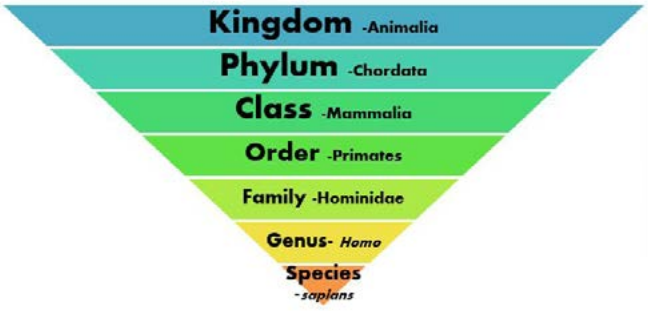


Image: Classification of Humans.

If we were going to sort humans using this way, we would start in **Kingdom** *Animalia* (animals), moving down the pyramid to *Phylum Chordata* (having a spinal cord), **Class** *Mammalia* (animals that nurse their young), **Order** *Primates* (animals having large complex brains and opposable thumbs), **Family** *Hominidae* (ability to walk upright), until we get down to the **Genus** *Homo* (human), and **Species** *sapiens* (modern human). Human's scientific name is *Homo sapien*. This double-name system is called **binomial nomenclature.** Every organism ever discovered is categorized and named using this system! This double name is used and understood by scientists around the world, even if they do not speak the same language, making taxonomy essential for understanding life on our planet!

Sources: kidsdiscover.com, marinesciencetoday.com, mensaforkids.org, milnepublishing.geneseo.edu, ucmp.berkeley.edu

Expand Your Mind!

Meet & Greet: Our Ocean Valentine Friends

CUTTLEFISH

Sepia officinalis

Cuttlefish aren't actually as cuddly as their name might imply! Cuttlefish are amazing cephalopods. Related to octopuses, they are extremely intelligent and masters of camouflage!

Cuttlefish are known as the "chameleons of the sea," since they can change both the color and pattern of their skin almost instantly! This helps them blend in with surroundings, to communicate, and to avoid predators!

Sources: animaldiversity.org, fao.org; montereybayaquarium.org; seas.harvard.edu; pt.gde-fon.com

ROSE CORAL

Manicina areolata

Rose corals do not look like your traditional red rose. These corals are an olive green- to grey-colored hard coral that can be found in the Caribbean and southern Gulf of Mexico, in shallow reefs, and in seagrass beds.

These corals are related to brain corals and will grow with bends and curves that can be said to resemble the petals on a rose!

Sources: bioweb.uwlax.edu; coral.aims.gov.au; sciencenetlinks.com; sciencesource.com

PINK CANDY CRAB

Hoplophrys oatesii

The pink candy crab, also known as the soft coral crab, is a small colorful decorator crab that lives in the Indo-pacific on soft corals. This pink and white spine-covered crab has incredible camouflage!

This crab will "decorate" its body with small pieces of the bright soft corals they live on by pinching them off and attaching them to their backs.

Sources: peerintoyourworld.com; species-identification.org; Bryan Mayes, flickr.com

Our education programs get kids into the bay!

Can You Commit to the Ocean?

CONSERVATION CORNER

Show the ocean some love this Valentine's Day by doing some simple things to help reduce your waste—especially your plastic waste!

It is said that around **18 billion pounds** of plastic waste makes its way from the coast and into the oceans every year. It's estimated that by 2050, the ocean will contain more plastic by weight than fish!

Here are some simple tips you can use to reduce your waste this holiday!

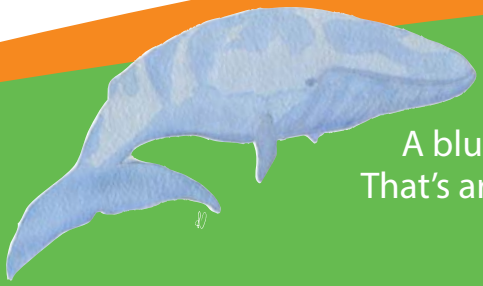
1. While searching for your Valentine's Day cards or a gift for a loved one, don't forget to bring your reusable shopping bags! Americans use around 100 billion plastic bags a year!
2. Make your own Valentine's Day cards! Try making your own valentines this year out of materials that you already have at home. Reusing recycled items or discarded materials in a new and inventive way to create a product of higher quality is called "upcycling!"
3. Recycle cards that you do not plan on keeping.
4. Recycle during holiday parties.
5. Say no to single-use plastics! Single-use plastics are things made out of plastic that are designed to be used only once, like plastic straws and eating utensils.
6. Try to avoid buying balloons for Valentine's Day parties or for loved ones. Balloons that are let go or disposed of improperly often end up in the ocean. Balloons can then be ingested by animals that mistake them for food!
7. Try to avoid buying candies and gifts with extra plastic packaging.

Sources: biologicaldiversity.org; epa.state.oh.us; forbes.com; news.nationalgeographic.com; oceancrusaders.org; encenter.org

Fun Facts about the Ocean's Valentines!

- Octopuses have **three** hearts!
- Sea otters will **hold hands** so that they do not drift away from one another while sleeping.
- Seahorses mate for life. The male and female meet every morning and **dance together** to reinforce their bond!

Sources: mnn.com; news.nationalgeographic.com; smithsonianmag.com



Did You Know...

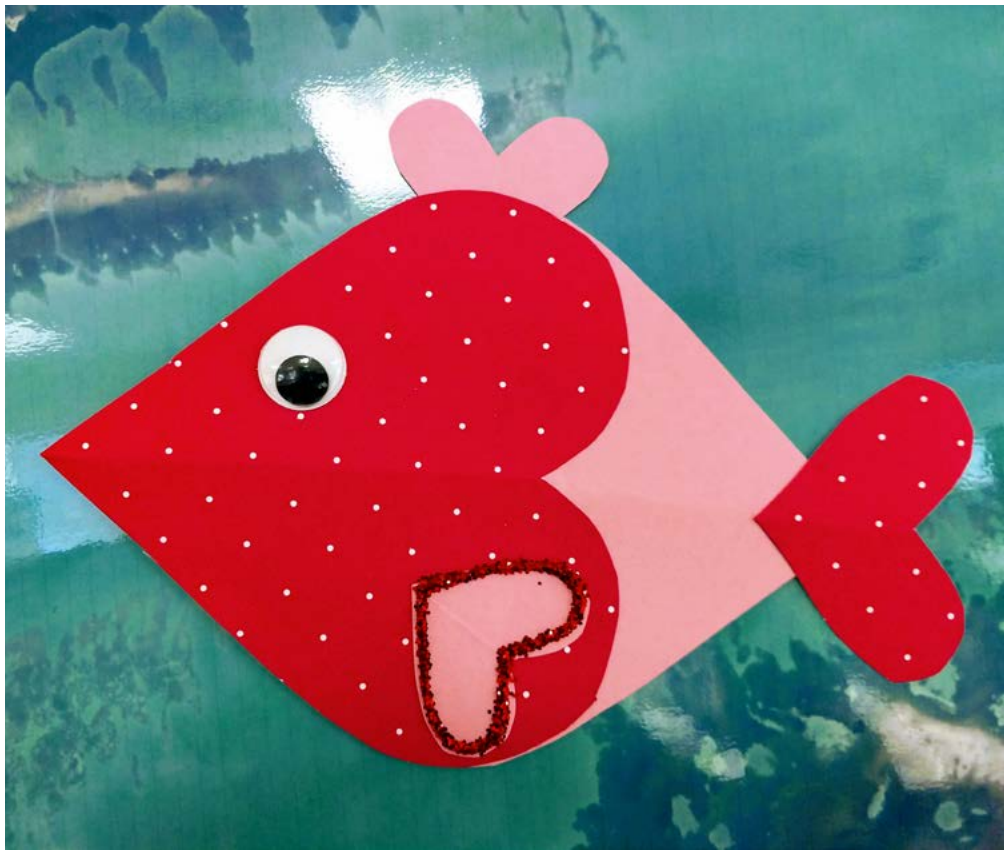
A blue whale's heart weighs around 400 pounds! That's around 640 times as much as a human heart!

Source: blog.education.nationalgeographic.org

Fun Activity:

Ocean-Themed Valentine's Day Cards

There are many fish in the sea! Show your love for the ocean by making these cute ocean-themed Valentine's Day cards!



Materials:

- Construction paper
- Scissors
- Glue
- Googly eye
- Markers
- Optional: markers and extra decorations

Instructions:

1. Ask for an adult's help.
2. Cut out two large hearts (around five inches) from construction paper. These will be used for the head and body of the fish.
3. Cut out one medium heart (around three inches) from construction paper. This will be used for the tail.
4. Cut out two small hearts (around two inches) from construction paper. These will be used for the fish fins.
5. Flip one of the large hearts and glue the two large hearts together. They should be glued top-to-top, like in the photo.
6. Attach the medium heart for the tail to the tip of the bottom heart.
7. Glue the googly eye near the front of the large top heart.
8. Glue one of your small hearts on top of the fish's body (top large heart) for a pectoral fin. Attach your second small heart on the top of your fish's body on the underside for a dorsal fin.
9. Write your Valentine's Day message on the back!

Sources: Audrey Mitchell, Pinterest.com

TAMPA BAY WATCH
Restoring the Bay Every Day

Kids' Pages is a quarterly newsletter supplement to the *Bay Watch Log.*

Please get your kids involved and sign them up to be a member today! Email **membership@tampabaywatch.org** or visit tampabaywatch.org.

Cover masthead artwork drawn by Sarah Kelly, one of Tampa Bay's talented youth artists.

Estuary EDventures

TAMPA BAY WATCH

Kids' pages Investigations

Topic: Ocean Valentines/ Scientific Names

Winter 2018-19 edition

Instructions: Read through the appropriate Kids' Pages edition and answer the questions below. Once all the questions have been completed, refer to the Answer Key to check your work.

Multiple Choice (choose one):

1. The science of how living things are grouped, classified, and named is called what?
   - a. Telemetry
   - b. Taxonomy
   - c. Topography
   - d. Taxidermy
2. Linneaus ultimately developed a system for sorting organisms into how many levels?
   - a. 7
   - b. 6
   - c. 8
   - d. 9
3. What is the scientific name for humans?
   - a. *Homo sapiens*
   - b. *Homo erectus*
   - c. *Homo habilis*
   - d. *Homo neanderthalensis*
4. How many hearts does an octopus have?
   - a. 2
   - b. 3
   - c. 4
   - d. 1
5. How many pounds does a blue whale's heart weigh?
   - a. 200
   - b. 300
   - c. 350
   - d. 400

Fill in the Blank:

6. Carl Linneaus, Swedish scientist born in 1707 who standardized the classification of organisms, is known as the "_____." (3 words)
7. Linneaus' double-name system for determining scientific names is called _____. (2 words)
8. Rose corals are related to _____ corals.
9. The pink candy crab is also known as the _____. (3 words)

Short Response:

10. Please create a list of five ways to reduce waste, in addition to the seven suggestions already listed in the *Conservation Corner* of the Kids' Pages publication. Feel free to use the suggestions as inspiration to think of new ways to show your love for the estuary and ocean.

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ANSWER KEY

1. B. At its basic level, taxonomy is sorting.

2. A. Kingdom, phylum, class, order, family, genus, and species.

3. A. Homo sapiens translates to "wise man."

4. B. They also have three brains!

5. D. That's 640 times the weight of a human heart.

6. Carl Linneaus, Swedish scientist born in 1707who standardized the classification of organisms, is known as the "**Father of Taxonomy.**" (3 words)

7. Linneaus' double-name system for determining scientific names is called **binomial nomenclature.** (2 words)

8. Rose corals are related to **brain** corals.

9. The pink candy crab is also known as the **soft coral crab.** (3 words)

10. Answers will vary. **Example answer:** *1) Stay updated on your city's recycling rules. 2) Elect for electronic mail/bills whenever possible. 3) Pack lunch in reusable containers. 4) Use a reusable water bottle to stay hydrated throughout the day. 5) Shop at second-hand stores or boutiques for unique clothing finds.*