# DOLPHIN RESEARCH CENTER

## **Dolphins In Tune**

Grade Level: K-2<sup>nd</sup>/3<sup>rd</sup>-5<sup>th</sup>

**Objectives:** Students will identify the characteristics of mammals in an active way.

## Florida Sunshine State Standards:

#### Science

(K-2) SC.G.1.1.4: The student knows that animals and plants can be associated with their environment by an examination of their structural characteristics.

(3-5) SC.G.1.2.2: The student knows that living things compete in a climatic region with other living things and that structural adaptations make them fit for an environment.

## Language Arts

(K-2) LA.C.2.1.2: The student recognizes simple nonverbal cues, such as use of eye contact, smiles, and hand gestures.

(K-2) LA.D 2.1.2: The student identifies and uses repetition, rhyme, and rhythm in oral and written text.

(3-5) LA.C.3.2.4: The student uses eye contact and gestures that engage an audience.

### National Science Education Standards:

Content Standard C (K-4) - Characteristics of Organisms: Organisms have basic needs. For example, animals need air, water, and food; plants require air, water, nutrients, and light. Organisms can survive only in environments in which their needs can be met. The world has many different environments, and distinct environments support the life of different types of organisms. Each plant or animal has different structures that serve different functions in growth, survival, and reproduction. For example, humans have distinct body structures for walking, holding, seeing, and talking.

Content Standard C (5-8) - Diversity and Adaptations of Organisms: Biological

evolution accounts for the diversity of species developed through gradual processes over many generations. Species acquire many of their unique characteristics through biological adaptation, which involves the selection of naturally occurring variations in populations. Biological adaptations include changes in structures, behaviors, or physiology that enhance survival and reproductive success in a particular environment

**Background:** Just as each creature has certain adaptations that enable it to survive in a given environment, dolphins have certain adaptations to

## **Key Terms**

**Mammal:** an animal that has warm blood, hair, and breathes air. Female mammals nurse their young and give birth to live young.

**Thermoregulation**: How a dolphin/whale maintains body temperature by releasing or absorbing heat through the flippers and tail flukes.

## Dolphins In Tune

enable them to live in their watery world, the ocean. Dolphins are mammals, not fish. What makes a dolphin a mammal?

- 1. They breathe air directly into their lungs through the blowhole. Dolphins can hold their breath for up to 7.2 minutes! (Are there some species that can hold breath for longer?)
- 2. They have hair at some point during their life cycle. Dolphins are born with dolphin mustaches! There are whiskers on the rostrum during their first few days of life.
- 3. They are warm-blooded.
- 4. They give birth to live young.
- 5. They nurse their young.

For more information, see Physiology and Natural History infofiles.

#### **Materials:**

- Copies of song (see below)
- Pictures of dolphins

**Teacher Prep Notes:** Rehearse the dolphin song to the tune of *Yankee Doodle* with your class so that they are all familiar with the tune. Make copies of the song for each student or post it on the overhead projector or chalkboard so everyone can see it and read/ sing together.

#### **Procedures:**

- 1. Have students stand in a circle.
- 2. Sing the song and encourage them to mimic your movements.
- 3. Repeat it a few times until they catch on to what you are doing.
- 4. Before actually performing it, break each verse down and discuss.
- How is a dolphin like us? Explain what a mammal is (the five characteristics) and that they breathe air like us. (Breathe in and out deeply). Ask students to name some other mammals (horses, cats, dogs, etc).
- Discuss how dolphins are warm-blooded and how they maintain body temperaturethermoregulation- have them say it after you. They release heat or absorb heat from their flukes and flippers. (Hug yourself and twist.)
- Discuss how dolphins are born with hair, like a little mustache, around the rostrum or beak. They lose their hair shortly after they are born. (Have the students pretend that they are smoothing a mustache.)
- Discuss how dolphins move their tails up and down when they are swimming. (Have class demonstrate with their hands and bob up and down) Is it the same as fish? No. (Fish move their tales from side to side.)

**Wrap Up:** Perform the song for class or parents!

## Taking it Further:

• Make up other songs and movements and share with class!



## **Dolphins Breathe Air In And Out...!**

(To the tune of Yankee Doodle)

Dolphins breathe air in and out
They are mammals
They use their blowholes as their nose
In and out the air goes
(Breathe in and out deeply)

Dolphins are warm-blooded
Their blood is warm and flowing
They maintain body temperature
By thermoregulating
(Hug yourself and twist)

Dolphins are born with hair
Eventually they go bald
They have a mustache very young
And soon have none at all!
(Outline imaginary whiskers with your fingers on your face as if you were smoothing a mustache)

Whales and dolphins move their tails
In up and downward motion
They're not fish
Their tails don't swish
From side to side through the ocean
(Put thumbs together and move palms of hands up and down like a tail and bob your body up and down as well)