

# DOLPHIN RESEARCH CENTER

## Counting Calories

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**Grade Level:** 3<sup>rd</sup>-5<sup>th</sup>

**Objective:** The student will be able to understand the different ways numbers are represented and used in the real world. Students will also demonstrate their understanding of place value by writing out in words the numbers provided.

### Florida Sunshine State Standards:

#### Mathematics

MA.A.1.2.1 The student names whole numbers combining three digit numeration and the use of number periods such as ones and thousands, and associates verbal names, written word names, and standard numerals with whole numbers.

#### Science

SC.G.1.2.5: The student knows that animals eat plants or other animals to acquire the energy they need for survival.

### 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.

**Content Standard C (5-8) - Regulation and Behavior:** All organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.

**Background:** A calorie is a unit of measure that tells how much energy is provided by certain foods. Marine mammals

need a specific amount of calories to maintain their body temperature in hot or cold weather, just like you do. Calories are also needed for growth and to maintain normal body weight. Dolphins eat fish, shrimp, and even squid! At Dolphin Research Center, our dolphins prefer a selection of fish such as herring, capelin, and sardines. Dolphins feed on all sorts of fish for the same reasons we order a salad and an entrée! Some fish, like capelin, are made up of mostly water. This is like salad to us. Dolphins are mammals like us so they need fresh water. They cannot drink their salty home, so how do they get their water? They digest and metabolize the fats and proteins in their fish into fresh water. The more they eat, the more hydrated they are! Herring are more of a source of fat and protein for dolphins. Then, just as we may love dessert, they will even eat what we call taste fish, such as sardines or marine smelt.

#### Key Terms

**Calorie:** A unit of measurement that tells how much energy is provided by certain foods



# Counting Calories at DRC!

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**Materials:**

- Copies of the hand out

**Procedure:**

1. Read the background information to the class and complete hand out.

**Wrap up:** Go over the answers and the extra credit!



# Counting Calories at DRC!

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

Write the number of calories each dolphin eats a day using the numbers provided.  
How do they get their calories? What do dolphins at Dolphin Research Center eat?



Fish of course! But dolphins also eat shrimp and squid.

Example: A walrus will consume 36,100 calories a day.

36,100 = Thirty six thousand one hundred

1. AJ will consume 8637.5 calories a day.

8,637.5 = \_\_\_\_\_  
\_\_\_\_\_

2. Pax will consume 10,699 calories per day.

10,699 = \_\_\_\_\_  
\_\_\_\_\_

3. Tanner will consume 1,834 calories per day.

1,834 = \_\_\_\_\_  
\_\_\_\_\_

4. Tursi will consume 10,378 calories a day.

10,378 = \_\_\_\_\_  
\_\_\_\_\_

5. Santini consumes 13,996 calories a day.

13,996 = \_\_\_\_\_  
\_\_\_\_\_

6. Loki will consume 17,012 calories in one day.

17,012 = \_\_\_\_\_  
\_\_\_\_\_

## EXTRA CREDIT:

Capelin contains 446 calories per pound. Herring contains 1,038 calories per pound.

Sardines contain 847 calories per pound. If Kilo eats two pounds of capelin, two pounds of herring, and one pound of sardines per day, how many calories does he consume each day?

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