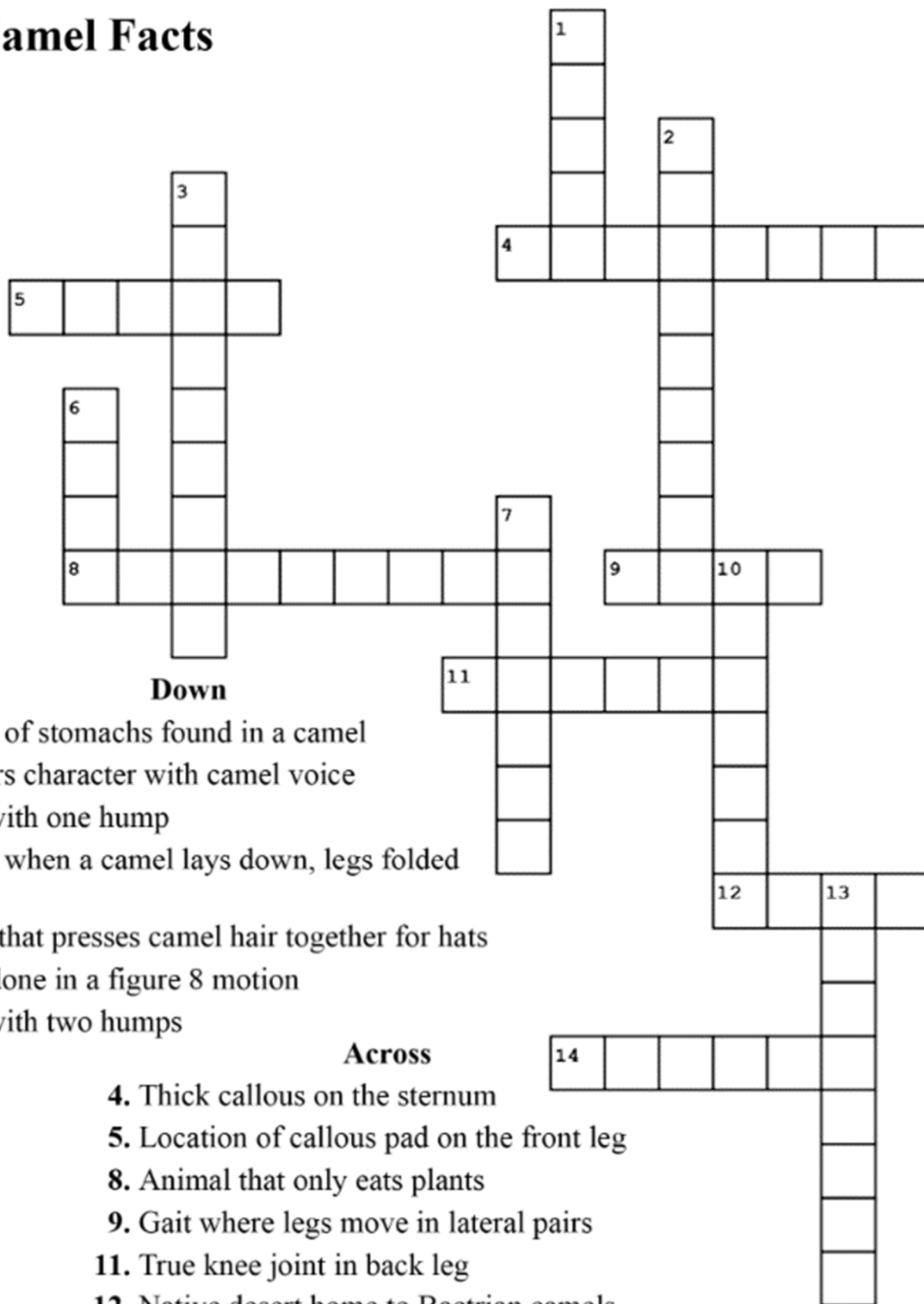


# Camel Facts



## Down

1. Number of stomachs found in a camel
2. Star Wars character with camel voice
3. Camel with one hump
6. Position when a camel lays down, legs folded under
7. Process that presses camel hair together for hats
10. This is done in a figure 8 motion
13. Camel with two humps

## Across

4. Thick callous on the sternum
5. Location of callous pad on the front leg
8. Animal that only eats plants
9. Gait where legs move in lateral pairs
11. True knee joint in back leg
12. Native desert home to Bactrian camels
14. Camels are known as "Ships of the \_\_\_\_\_"





# NATIONAL SERVICE ANIMALS MONUMENT

*Honoring All Service Animals and Their Handlers*

## **Camel Information**

**\*\*** *Please note that blocks of information marked with an asterick contain vocabulary words found in the accompanied cross-word puzzles. Educators, please use the information provided to create lessons appropriate for the abilities of your students. Additional websites and book recommendations may be found on the National Service Animals Monument Education Program pages. It is the hope of NSAM to foster a growing interest in animals that have served, and continue to serve us, in a wide variety of roles, as well as increase an understanding of the remarkable human-animal bond.*

\*Camels have two main species, the **Dromedary**, or one-humped camel (*Camelus dromedarius*), and the **Bactrian** (*Camelus bactrianus*), the camel with two humps. An easy way to remember which is which is to imagine a capital "D" tipped onto the flat side, creating one hump, like the Dromedary camel. The capital letter "B" tipped over, creates two humps, like the Bactrian camel.

\***Dromedary** camels are also known as Arabian camels, and are native to the dry, desert regions of East Africa and western Asia. Like the desert, Dromedary camels are generally tan, ranging from cream to caramel brown, however there are rare exceptions like white, black, and pinto patterned camels. They are the taller and faster of the two species with adults reaching 6-7 feet tall, and capable of sustained speeds of 25 mph, with bursts up to 40 mph. These camels are used for racing in Saudi Arabia and other parts of the Middle East.

\***Bactrian** camels are native to Asia, and still populate the **Gobi** Desert in China and Mongolia. Better suited for the extreme heat and cold, the Bactrian camels are stockier, with thicker hair coats. Their specialized coat insulates and protects them in temperatures ranging from -20 to 120 degrees Fahrenheit. Their hair consists of a thick, wooly undercoat, and a longer, rougher outer coat. Both are shed in clumps, which can be gathered and spun like wool fiber to make yarn, or processed by **felting**, commonly used to make hats. Bactrian camels can be a wide variety of colors ranging from white to golden tan to dark chocolate brown.

\*Camels are **herbivores**, meaning they only eat plants. They have a specialized split upper lip that enables the camel to efficiently strip leaves off of branches, leaving the branch intact to later sprout more leaves. Camel lips are thick and leathery, traits that allow them to eat thorny plants without injury. In the southwest United States, tumbleweeds and cactus are favorite snacks.

\*Camels are ruminants, having **three stomachs** to digest their food. Once a plant is chewed and swallowed, it is partially digested, regurgitated back into their mouth as a ball of cud, chewed, and swallowed again. An agitated or angry camel may discharge the cud ball in a projectile vomit display of irritation launching the slimy mass easily 30 feet or more. Having multiple stomachs allows the camel to absorb the maximum amount of nutrients and moisture from their food. This results in fecal balls that are dense and dry.

Camels have eyes are especially suited to the bright, sandy desert. Their skull has bony protrusions above each eye which serves to provide shade, a bit like a built in sun visor. Their eyelashes are very thick and long, which also provide shade, and protect the eye from sand and dust. Camels have third eyelids which are clear, acting like a windshield to protect the surface of their eyes from being scratched during sandstorms.

\*Like cows and sheep, camels have upper and lower molars, but only incisors on their lower jaw. **When they chew their food, camels jaws move in a figure 8 motion**, grinding food with their molars, and mashing it against the hard upper palate in the roof of their mouth.

Other facial adaptations include small ears lined with dense fur to prevent sand from entering the ear canal, and long, slender nostrils which they can pinch closed, also to keep sand out. Bony protrusions above their eyes act like awnings, providing shade for their eyes from the sun.

\*Camels have thick, calloused skin pads on their **elbows, stifles** (true knee joint in the upper hind leg), and along their sternum to protect their skin from hot desert sand when they lay down. The sternal pad is called a "**pedestal**" and is over an inch thick with a texture similar to tortoise shell. Camels are trained to "**kush**" or lay down with their legs folded under them. In a kush position, it is much easier for a handler to mount or dismount, load a pack saddle, or use the camel as a shield against desert sandstorms.

\*During the making of the movie "Star Wars" a camel's guttural vocal sounds were used to create the voice of "**Chewbacca**" the Wookiee.

\*Due to their ability to travel great distances, while carrying heavy loads, camels were used in caravans across Egypt, earning them the nickname "**Ships of the Desert.**" When camels accelerate from the walk, they will begin to **pace**. This faster speed involves both legs on the same side, moving forward and back together (by contrast, most horses trot, moving their legs in diagonal pairs). Pacing creates a rocking side-to-side movement, which could also attribute to the "ships of the desert" nickname.

#### Scientific classification of camels:

Kingdom: Animalia (Animals)

Phylum: Chordata (animals with notochords (in this case vertebrae and spinal cords))

Class: Mammalia (mammals – vertebrate animals that produce milk and have hair or fur)

Order: Artiodactyla (having even-toed hooves such as sheep, pigs, giraffes, and camels)

Family: Camelidae (camels, llamas, guanacos, alpacas, vicunas)

Genus: Camelus (camels)

species: bactrianus (Bactrian camels)

species: dromedarius (Dromedary camels)

