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# DESERT IS COVERED BY SAND WHILE DESSERT IS COVERED BY CREAM

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**ABSTRACT:** Desert is a place where water is absorbed in sand and dessert is a matter which creates mouth-watering event. Desert is covered by sand whereas dessert is embedded by cream which is yummy for mouth-watering.

**KEYWORDS:** Desert, Dessert, Sand, Oasis, Barren Land.

## INTRODUCTION

A dessert is a sweet food served at the end of a meal, like cake or ice cream. A desert, on the other hand, is a dry, barren area of land, often sandy and with little rainfall, like the Sahara. The key difference is in the spelling and meaning: "dessert" has two "s"s and refers to food, while "desert" has one "s" and refers to a geographical location.

**Desert:** A desert is a region that receives very little precipitation (rain or snow), resulting in a dry, arid climate and sparse vegetation. A desert is a landscape where little precipitation occurs and, consequently, living conditions create unique biomes and ecosystems. The lack of vegetation exposes the unprotected surface of the ground to denudation. About one-third of the land surface of the Earth is arid or semi-arid. This includes much of the Polar Regions, where little precipitation occurs, and which are sometimes called polar deserts or "cold deserts". Deserts can be classified by the amount of precipitation that falls, by the temperature that prevails, by the causes of desertification or by their geographical location.

Examples: The Sahara Desert, the Thar Desert.
The camel [*Camelus dromedarius*] is known as the "ship of the desert". This is because camels have several unique adaptations that allow them to survive and thrive in the harsh desert environment. Here's why camels are called the "ship of the desert".

- Carrying Capacity: Camels can carry heavy loads across long distances, making them essential for transportation in desert regions.
- Adaptations to Heat: Camels can tolerate high body temperatures, reducing the need to sweat and conserve water.
- Water Conservation: They can go for long periods without water, storing fat in their humps which can be converted to energy and water when needed.
- Protection from Sand: Camels have special adaptations like double eyelashes and the ability to close their nostrils to protect them from sandstorms.
- Padded Feet: Their wide feet prevent them from sinking into the soft sand.
- Diet: Camels can eat a variety of desert vegetation, including plants with thorns, thanks to their tough lips.[1]

The word "desert" is pronounced with the emphasis on the first syllable: DEH-zuh\rt. During the day, desert temperatures rise to an average of 38°C (a little over 100°F). At night, desert temperatures fall to an average of -3.9°C (about 25°F). The Lut Desert in Iran is the hottest desert in the world. Temperatures there can reach 159°F (70°C) on average.

**Figure-1: Thar desert and Sahara desert.**

The Lut Desert, widely referred to as Dasht-e Lut, is a salt desert located in the provinces of Kerman and Sistan-Baluchestan, Iran. It is the world's 33rd-largest desert, and was included in UNESCO's World Heritage List on July 17, 2016. The name is derived from Lut which means 'bare, empty' in Persian and dasht which means 'plain' in Persian. The surface of its sand has been measured at temperatures as high as 70.7°C (159.3°F), the highest-known land surface temperature. The Sahara Desert is one of the driest and hottest regions of the world, with a mean temperature sometimes over 30°C (86°F) and the average high temperatures in summer are over 40°C (104°F) for months at a time, and can even soar to 47°C (117°F). Deserts can experience drastic temperature swings between day and night because the air is very dry and lacks moisture, leading to rapid heat loss at night. The lack of water vapour in the air means there's nothing to trap heat radiated from the ground, allowing it to escape quickly into space, causing a rapid drop in temperature. A desert is a dry, barren area of land, typically with little or no vegetation, that receives very little rainfall.

**Figure-2: Desert the barren land of sand.**

Deserts can be hot or cold and are characterized by their aridity, meaning they experience a moisture deficit where evaporation exceeds precipitation. They can be covered in sand, rocks, or even salt flats.

- Aridity: Deserts are defined by their lack of precipitation. They typically receive less than 25 centimeters (10 inches) of rainfall annually.
- Temperature Extremes: While many people associate deserts with intense heat (like the Sahara), deserts can also be cold, such as the polar deserts of Antarctica and the Arctic.
- Sparse Vegetation: Due to the low rainfall and harsh conditions, deserts generally have very little plant life. Plants that do survive, like cacti and shrubs, often have adaptations to conserve water.
- Diverse Landscapes: Despite the common image of sand dunes, deserts can feature a variety of landscapes, including rocky areas, salt flats, and even mountains.
- Ecosystems: Deserts are diverse ecosystems with unique flora and fauna adapted to the challenging environment.

**Figure-3: Death Valley.**

- Dry air: Dry air has a lower capacity to hold heat compared to humid air.
- Lack of humidity: The absence of water vapour in the air allows the desert ground to radiate its heat directly into space without being trapped by the atmosphere, leading to a rapid cooling effect.
- No clouds: Clouds can act as a blanket, trapping heat and preventing it from escaping into space. Deserts often have clear skies, allowing the heat to escape unimpeded.
- Sand's properties: Sand is a good absorber and radiator of heat. It heats up quickly during the day and cools down rapidly at night.
- Radiation: At night, the ground radiates its stored heat as infrared radiation into space, causing the temperature to drop considerably.[2]

Death Valley is a desert valley in Eastern California, in the northern Mojave Desert, bordering the Great Basin Desert. It is thought to be the hottest place on Earth during summer. The largest desert in India is the Thar Desert, also known as the Great Indian Desert. It's a vast arid region located in north western India. It spans across four Indian states: Rajasthan, Punjab, Gujarat, and Haryana, and extends into Pakistan. The Sahara Desert covers an incredible 9.2 million km², which is almost the same size as China, and a total of 8% of the earth's land area.[3]

- Size: It covers an area of approximately 77,000 square miles (200,000 square kilometres). Death Valley is a desert valley in Eastern California, in the northern Mojave Desert, bordering the Great Basin Desert. It is thought to be the hottest place on Earth during summer. Death Valley's Badwater Basin is the point of lowest elevation in North America, at 282 feet (86 m) below sea level. It is 84.6 miles (136.2 km) east-southeast of Mount Whitney – the highest point in the contiguous United States, with an elevation of 14,505 feet (4,421 m). The largest desert in the world is the Antarctic Polar Desert, located on the continent of Antarctica. It covers an area of approximately 5.5 million square miles. While most people associate deserts with sand and heat, the Antarctic desert is a polar desert, characterized by its extremely cold temperatures and ice and snow cover.
- Climate: The Thar Desert has a dry climate with low annual rainfall, typically less than 150 mm.

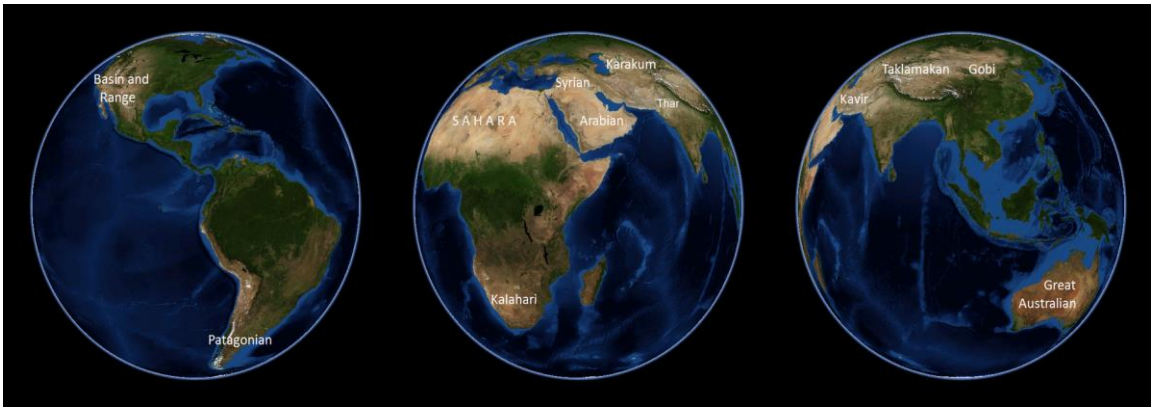


**Figure-4: The world's largest non-polar deserts.**

Features: It is characterized by rolling sand dunes and a sparse amount of vegetation.

An oasis is a fertile area in a desert, sustained by a reliable source of water, typically a spring or underground water that supports vegetation and animal

life. Oases are crucial for desert survival, providing resources like water and food for both humans and animals, and historically have been vital for trade and transportation routes.[4]

**Figure-5: Oasis.**

Oases are characterized by the presence of water surrounded by vegetation in an otherwise arid or desert environment.

- Water Source: The water source can be a natural spring, a well, or an underground aquifer that allows water to reach the surface.
- Vegetation: The presence of water allows for the growth of plants, shrubs, and trees, creating a distinct green area within the desert.
- Animal Life: Oases provide habitats and resources for various animals, making them vital for biodiversity in desert ecosystems.
- Human Significance: Historically, oases have been essential for trade and travel in desert regions, acting as rest stops and providing essential supplies. They have also influenced the establishment of settlements and cities.
- Formation: Oases can form naturally due to geological factors like underground water flow or through human intervention, like well construction.

**Figure-6: Cactus [*Echinocactus platyacanthus*].**

Types: Oases vary in size, from small patches of vegetation around a spring to larger areas with cultivated land and settlements. Deserts are hot and dry areas where rainfall occurs very rarely. Since there are fewer trees, the rainfall is also less. Therefore, there is always a scarcity of water in the deserts. It is a place where the evaporation of water is more than the amount of rain it receives. There are many different types of desert plants, including cacti, succulents, acacias, mesquite, creosote bush, and yucca. Each one has adapted in its own way to survive in the harsh desert environment. Cacti are perhaps the best-known desert plants.[5]

**Dessert:** A dessert is a sweet course, typically eaten at the end of a meal.
Examples: Cake, pie, ice cream, fruit falooda.

The word “dessert” is pronounced with the emphasis on the second syllable: deh-ZERT.

**Figure-7: Dessert.**

The term "boat of dessert" refers to desserts shaped like or presented in a boat-like form. These can range from individual portions to larger, decorative displays. Common examples include banana boats (grilled bananas with toppings), tartlets shaped like small boats, or even elaborate cake designs shaped like actual boats.

Here's a breakdown of what "boat of dessert" can mean.

- Individual Dessert Boats: These are often smaller portions of desserts like banana boats, tartlets, or even mini cakes presented in a boat-like dish or container.
- Decorative Dessert Boats: This refers to larger, more elaborate desserts or displays where the dessert is crafted to resemble a boat, often for special occasions or themed events.
- Examples: Banana Boats: Grilled or baked bananas with toppings like chocolate, marshmallows, or fruit, often wrapped in foil.
- Barquette aux Marrons: French pastry boats filled with chestnut puree.
- Lemon Cream Taco Boats: Cinnamon-sugar coated tortillas filled with lemon cream.
- Cake Boats: Cakes shaped and decorated to resemble boats.
- Dessert Platters: Platters with various bite-sized desserts presented in a boat-like arrangement.

Purpose: Dessert boats can be a fun and creative way to present desserts, adding visual appeal and a touch of whimsy.
Desserts can be defined as a usually sweeter course that concludes a meal. This definition includes a range of courses ranging from fruits or dried nuts to multi-ingredient cakes and pies. Many cultures have different variations of dessert. Dessert is a course that concludes a meal; the course consists of sweet foods, such as cake, biscuit, ice cream, and possibly a beverage, such as dessert wine or liqueur. Some cultures sweeten foods that are more commonly savoury to create desserts. In some parts of the world, there is no tradition of a dessert course to conclude a meal. A dessert is a usually sweet course or dish, typically served at the end of a meal. It can include a variety of foods like cakes, pastries, ice cream, and fruits. The term can also refer to fresh fruit, especially in British English. The word "dessert" comes from the French "desservir," meaning "to clear the table". Desserts generally consist of sweet items.[6]

Course at the End of a Meal: They are traditionally served after the main course of a meal.

Variety of Dishes: Desserts encompass a wide range of foods, including cakes, cookies, pies, puddings, ice cream, and more.

**Figure-8: Ice cream, Pudding & Falooda.**

- Fruit as Dessert: Fruit, with its natural sweetness, is also a common dessert option.
- Regional Variations: Different cultures have their own unique dessert traditions, such as the use of breakfast items as desserts in some parts of Russia.
- Historical Significance: The concept of a dedicated sweet course has evolved over time, with elaborate dessert presentations reaching a peak in European courts.
- Beverages: Sometimes, dessert is accompanied by sweet wines or liqueurs.
- Dessert is a sweet course, typically served at the end of a meal. It often includes items like cakes, cookies, pastries, ice cream, and fruit, but can also include beverages like dessert wine or liqueurs. The term can also encompass a variety of other sweet dishes depending on cultural traditions.
- Sweetness: Desserts are generally defined by their sweetness, often achieved through ingredients like sugar, honey, or fruit.

Course: Dessert is typically the last course of a meal, following the main course and any appetizers.
Variety: The specific types of desserts vary widely across cultures and cuisines. Some common examples include cakes, pies, puddings, ice cream, and fruit.[7]
Beverages: Dessert can also include beverages like dessert wine, liqueurs, or coffee.
Savoury elements: While typically sweet, dessert can sometimes include savoury elements like cheese, nuts, or other items, depending on the specific meal and cultural traditions. A dessert is typically the sweet course that, after the entrée and main course, concludes a meal in the culture of many countries, particularly Western culture. The course usually consists of sweet foods, but may include other items. The most popular desserts in India include gulab jamun, jalebi, kheer, falooda or various types of ladoo. However, the popularity of sweets varies greatly depending on regional nuances. Dessert storage temperatures vary depending on the specific type of dessert, but generally, maintaining a cool temperature is key to preserving freshness and quality. Dairy-based desserts should be refrigerated at 4°C (40°F) or less. Baked goods can often be stored at room temperature, but some, like those with frosting, need refrigeration.

Refrigerated Desserts (Dairy-based, cream-filled, etc.): Most desserts with dairy or cream should be stored in the refrigerator at 4°C (40°F) or less. This includes items like cheesecakes, cream pies, custard-based desserts, and any dessert with fresh cream or buttercream frosting. Refrigeration helps prevent spoilage and maintains the texture of these desserts.

- Room Temperature Desserts (Baked goods): Many baked goods like cookies, cakes (without frosting), and brownies can be stored at room temperature in an airtight container. Ideal room temperature is generally between 18-22°C (64-72°F). However, items like cupcakes with frosting and fruit-based desserts should be refrigerated.
- Freezer Storage: For long-term storage, freezing is a great option for many desserts. Frozen desserts can last for several months if properly wrapped and stored. When thawing, it's best to do so in the refrigerator.

Specific Examples:

- Cakes: If frosted, keep refrigerated. If unfrosted, can be stored at room temperature for a few days.
- Cookies: Store in an airtight container at room temperature for up to a couple of weeks.
- Cupcakes: If frosted, refrigerate. If unfrosted, can be stored at room temperature for a shorter period.
- Ice Cream: Requires freezing temperatures, typically around -18°C (0°F) or lower.

Important Considerations:

- Food Safety: Avoid the "danger zone" (5-60°C or 41-140°F) where bacteria can multiply rapidly.
- Airflow: Ensure proper ventilation to prevent condensation and maintain texture.
- Humidity: Moderate humidity levels help prevent desserts from drying out.
- Light: Protect desserts from direct sunlight, which can affect color and flavour.[8]

## CONCLUSION

A desert is a landscape where little precipitation occurs and, consequently, living conditions create unique biomes and ecosystems. The lack of vegetation exposes the unprotected surface of the ground to denudation. About one-third of the land surface of the Earth is arid or semi-arid. This includes much of the Polar Regions, where little precipitation occurs, and which are

sometimes called polar deserts or "cold deserts". Deserts can be classified by the amount of precipitation that falls, by the temperature that prevails, by the causes of desertification or by their geographical location. Deserts are formed by weathering processes as large variations in temperature between day and night strain the rocks, which consequently break in pieces. Although rain seldom occurs in deserts, there are occasional downpours that can result in flash floods. Rain falling on hot rocks can cause them to shatter, and the resulting fragments and rubble strewn over the desert floor are further eroded by the wind. This picks up particles of sand and dust, which can remain airborne for extended periods – sometimes causing the formation of sand storms or dust storms. Wind-blown sand grains striking any solid object in their path can abrade the surface. Rocks are smoothed down, and the wind sorts sand into uniform deposits. The grains end up as level sheets of sand or are piled high in billowing dunes. Other deserts are flat, stony plains where all the fine material has been blown away and the surface consists of a mosaic of smooth stones, often forming desert pavements, and little further erosion occurs. Other desert features include rock outcrops, exposed bedrock and clays once deposited by flowing water. Temporary lakes may form and salt pans may be left when waters evaporate. There may be underground water sources in the form of springs and seepages from aquifers. Where these are found, oases can occur.

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