

For Creative Minds

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The Desert Habitat

Some deserts are hot, and some are cold, but the one thing that all deserts have in common is that they are dry. On average, a desert gets less than 10 to 12 inches (25-30 cm) of rain a year. Some do not even get that much. The driest place on Earth, the Atacama Desert in South America has areas that haven't seen any rain in 400 years!

Hot (tropical or subtropical) deserts are warm throughout the year, but very hot in the summer. Temperatures drop at night to cool or cold. Rain comes in short bursts any time of the year and may even evaporate before it hits the ground. There are long, dry periods in between rain showers. The Chihuahan, Sonoran, and Mojave Deserts in Mexico and the American Southwest are hot deserts. The Sahara and Kalahari Deserts in Africa are also hot.

Polar deserts have long, cold winters and can have snow- or ice-covered ground. Antarctica and parts of Arctic Europe and North America are polar deserts.

Coastal deserts are found along continental coasts and have salty soils or sand. They generally have cool winters (with whatever rain there may be) and long, warm, dry summers. The Atacama in South America (Chile) and the Namib in Africa are coastal deserts.

Cold winter deserts (also called semi-arid deserts) have cold winters with some snow and long, dry, hot summers. Many are formed by a "rain shadow effect," which is when high mountains block precipitation from reaching the area. The Great Basin Desert in Utah and Montana and the Gobi Desert in Asia are cold winter deserts.



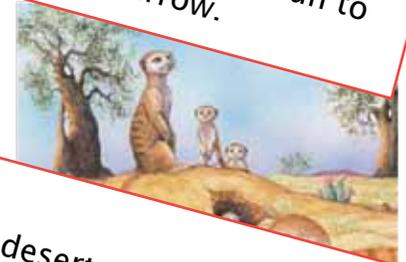
Desert Fun Facts

Cacti can hold water in their stems (trunks). The spines (leaves) protect the plant from animals and break up airflow, helping the cacti to hold water.



One meerkat acts as guard while the rest of the clan hunts or plays. The guard barks a warning to let the group know to run to their burrow.

Lesser long-nosed bats depend on cacti (and agaves) for food. The bats spread the cacti's pollen to help the plants grow. The cacti bloom at night so the nocturnal bats can find them!

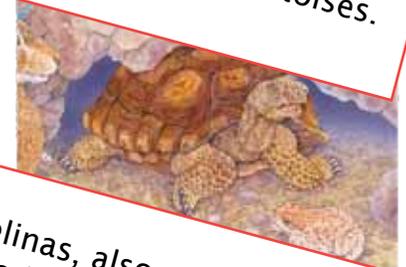


When scared, thorny devils tuck their heads and show a fake head. They can also change color to match the dirt.



Many desert animals spend their days hiding from the hot sun in burrows dug by desert tortoises.

Gila monsters have bright colors to warn animals that they are poisonous. We use this poison in a medicine to treat diabetes.



Male ostriches can be 9 feet (2.7 m) tall! They dance (bow, wave their wings, and bob up and down) to attract females. Ostrich eggs are about the size of a small cantaloupe.



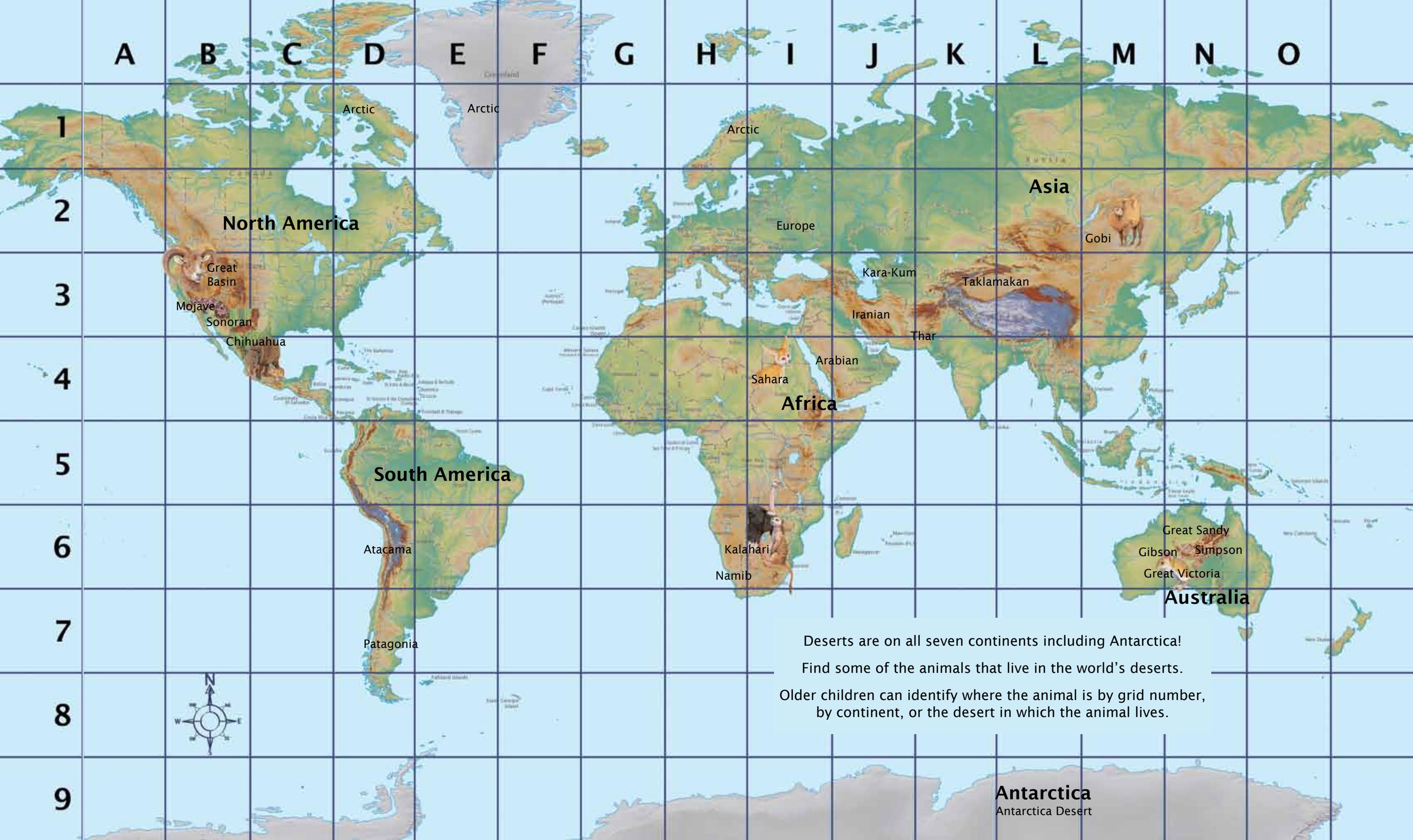
Javelinas, also called collared peccaries, have a ring of light-colored fur around their necks that looks a bit like a collar.

Deserts of the World

Use the map on the next page to find the location or answer the following questions. Answers are upside down at the bottom of this page. Older children should identify animal locations with grid coordinates.

1. On what continent is the Sahara Desert?
2. In which desert do Bactrian camels live?
3. In which desert do fennec foxes live?
4. On what continent do tawarwas and thorny devils live?
5. On what continent do lesser long-nosed bats and Gila monsters live?

Answers: 1) Africa; 2) Gobi; 3) Sahara; 4) Australia; 5) North America



A B C D E F G H I J K L M N O

1

2

3

4

5

6

7

8

9

North America

Great Basin
Mojave
Sonoran
Chihuahua

South America

Atacama

Patagonia

Europe

Africa

Sahara

Kalahari
Namib

Asia

Gobi

Kara-Kum

Taklamakan

Iranian

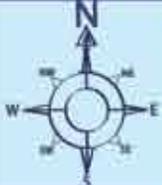
Thar

Arabian

Great Sandy
Gibson Simpson
Great Victoria

Australia

Antarctica
Antarctica Desert



Deserts are on all seven continents including Antarctica!
Find some of the animals that live in the world's deserts.
Older children can identify where the animal is by grid number,
by continent, or the desert in which the animal lives.

Match the Desert Adaptations

Plants and animals that live in the desert have special body parts or behaviors (adaptations) that help them survive without very much water. Those living things that live in hot, tropical deserts have to protect themselves from the sun too. Match the plant or animal adaptations. Answers are upside down at the bottom of the page.

1 My humps store fat to give me energy when I can't find food. I can go several days without drinking water, but when I do find water, I can drink gallons in minutes. I can close my nostrils so sand doesn't blow up my nose. Bushy eyebrows and two rows of eyelashes keep sand out of my eyes.

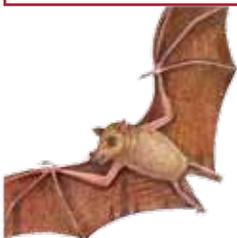
2 I get water from eating prickly pear cactuses (spines and all) that most other animals can't eat. I hunt early in the morning and in the evening (crepuscular) when it is cool. If it gets too hot, I'll just hunt at night.

3 I get most of the water I need from the plants I eat. I spend most of my time living in my underground burrow where it is cool. If it gets too hot in the summer, I go into a deep sleep—like summer hibernation (aestivation).

4 My huge ears help to keep me cool like "air conditioners." I have fur on the bottom of my feet so the hot desert sand doesn't burn me. I sleep all day and am up at night (nocturnal) when it is cooler. I am similar to the kit fox found in the deserts of the American Southwest.

5 I store fat and water in my thick tail and can go months between meals. In fact, I only eat three or four times a year. I spend most of my time in my underground burrow. My bright colors let other animals know that I am poisonous.

6 I sleep in a deep, dark cave, mineshaft, or even in trees or cracks in rocks during the hot day. I come out at night (nocturnal) when it is cool. My very long tongue helps me to reach deep into cactus flowers to sip the nectar that I need to eat.



lesser long-nose bat



javelina



desert tortoise



Gila monster



fennec fox



Bactrian camel

thorny devil



meerkat



prickly pear



ostrich



saguaro



tarkawara



7 I store water in long, flat, green stem “pads” and protect those pads with sharp spines. I grow low to the ground to help conserve any moisture I can find.

8 My ears close to keep sand out and the dark patches around my eyes cut down the Sun’s glare so I can see.

9 Ridges between the thorns along my back carry rainwater and dew to my mouth. If it gets too hot during the day, I use my claws to dig a shallow burrow, or I find shade under a plant. I am similar to horned lizards found in the western part of the North American continent.

10 I sleep with my family in a one-room burrow during the day (nocturnal). I get most of my water from the seeds that I eat, but I will also travel for long distances to find rain. I am similar to the kangaroo rat in the Mexican and American deserts and the jerboa in Africa and Asia.

11 Like many types of cacti, I store water in my fleshy stems and have spines to protect them. My roots aren’t deep, but they are very long to catch as much water as possible when it rains. My roots can be as long as I am tall!

12 Like many desert-living animals, I can go for several days without drinking anything. If I do find water, I like to take a bath! My very long legs help me to see danger coming so I can run away—and I can run very fast! I can even kick a lion if I have to!

Answers: 1. Bactrian camel; 2. javelina; 3. desert tortoise; 4. fennec fox; 5. Gila monster; 6. lesser long-nosed bat; 7. prickly pear cactus; 8. meerkat; 9. thorny devil; 10. tarkawara; 11. saguaro; 12. ostrich