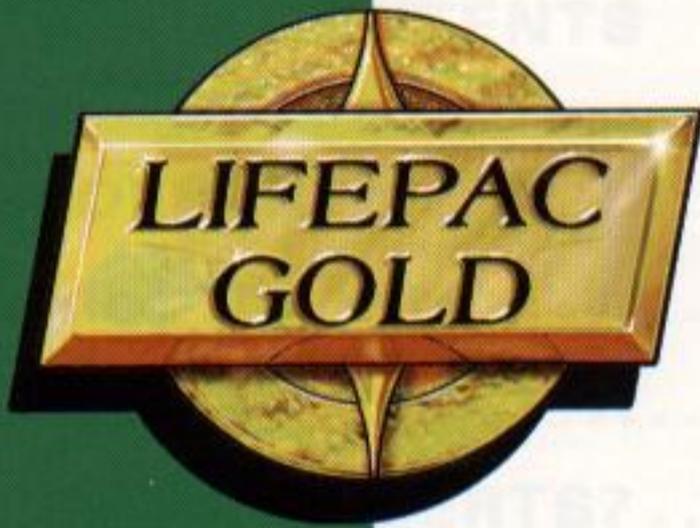


New  
**403**  
Edition



# HISTORY & GEOGRAPHY

# HISTORY & GEOGRAPHY 403

## DESERT LANDS

### CONTENTS

<b>I. WHAT IS A DESERT?.....</b>	<b>4</b>
<b>Description of Deserts .....</b>	<b>6</b>
<b>Life in the Desert .....</b>	<b>8</b>
<b>II. WHERE ARE THE DESERTS? .....</b>	<b>15</b>
<b>Deserts of the Northern Hemisphere.....</b>	<b>16</b>
<b>Deserts of the Southern Hemisphere.....</b>	<b>20</b>
<b>III. HOW DO PEOPLE LIVE IN A DESERT? .....</b>	<b>28</b>
<b>Traditional Ways of Life.....</b>	<b>28</b>
<b>Modern Ways of Life.....</b>	<b>34</b>

**Author:**

Editor:

Assistant Editor:

Graphic Design:

**Theresa K. Buskey, B.A., J.D.**

Alan Christopherson, M.S.

Annette M. Walker, B.S.

Mark Nunes, A.A.

Keith A. Piccolo, B.F.A.

Brian Ring, A.A.

## Alpha Omega Publications

300 North McKemy Avenue, Chandler, Arizona 85226-2618

Copyright © MCMXCVIII, All rights reserved



# DESERT LANDS

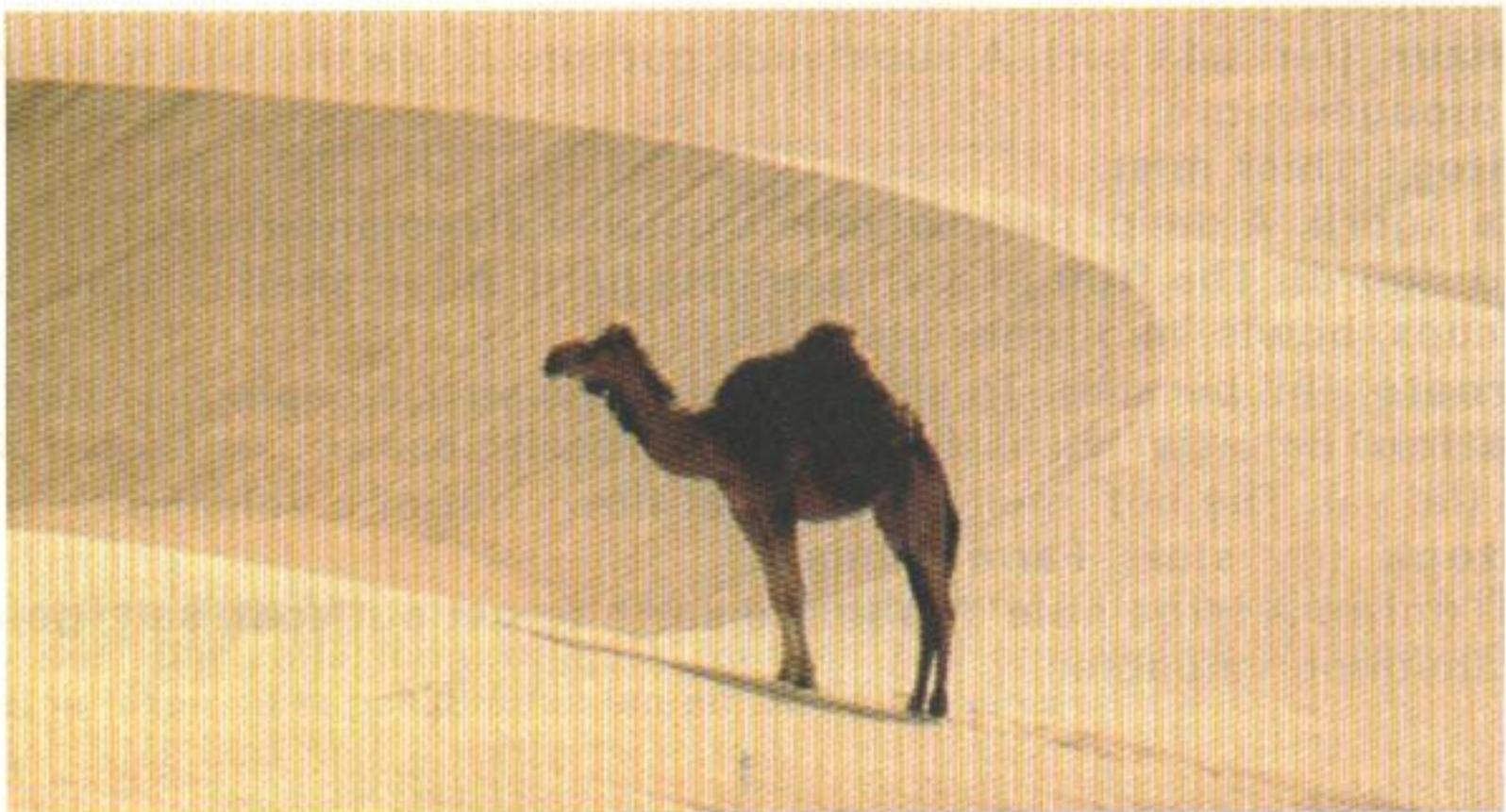
Deserts are very dry places. They are found all over the world. In this LIFEPAK you will learn to find the world's deserts on a map. You will learn about the animals and plants that live in the deserts. You will learn about the minerals that are found there. You will also study some of the peoples who live in the desert. Life is hard in the desert, and you will learn why.

## OBJECTIVES

**Read these objectives.** The objectives tell you what you should be able to do when you have successfully completed this LIFEPAK.

When you have finished this LIFEPAK, you should be able to:

1. Locate seven of the great deserts of the world on a map;
2. Know the continents and some map features;
3. Explain how moisture is blocked from reaching a desert;
4. Explain how plants and animals live in the desert;
5. Describe seven of the major deserts of the world;
6. Describe the traditional ways of life in the desert;
7. Know the names and locations of some desert people; and
8. Explain how modern inventions help people to live in the desert.



**Study these new words.** Learning the meanings of these words is a good study habit and will improve your understanding of this LIFEPAAC.

## VOCABULARY

**Arabian Peninsula** (a rā' bē an pe nin' sa la). A piece of land in southwest Asia surrounded by the Red Sea, the Indian Ocean, and the Persian Gulf.

**altitude** (al' ta tüd). Height above the level of the ocean. **aquifer** (äk wa fēr). A large body of underground water.

**barren** (bar an). Not able to produce much.

**burrow** (bēr' ō). A hole in the ground used by an animal for shelter.

**cactus** (kāk' tas). A fleshy plant with spines instead of leaves that grows in hot, dry regions of America.

**canal** (ka nal'). Passage dug to carry water.

**caravan** (kar' a van). A group of travelers with their animals and goods.

**climate** (klī' mit). The kind of weather a place most often has.

**coast** (kōst). The land along the sea.

**continent** (kon' ta nant) One of the seven great masses of land on earth. (North America, South America, Africa, Europe, Asia, Australia, Antarctica).

**continuous** (kan tin' yū as). Without a stop or break.

**crop** (krop). Plants grown or gathered by people for their use.

**dew** (dü). Moisture from the air that collects on cool surfaces at night.

**domesticate** (da mes' ta kat). To make a wild animal tame.

**dune** (dü n). A hill of sand heaped up by the wind.

**evaporate** (i vap' a rat). To change from a liquid into a gas.

**export** (ek spōrt'). To send goods out of one country for sale and use in another.

**fertilizer** (fēr' tal i zēr). A substance put into or on the soil to make it produce more.

**fog** (fog). Thick mist.

**gorge** (gōrj). A deep, narrow valley, usually steep and rocky.

**gourd** (gōrd). The fruit of a vine whose hard, dried shell is used for cups, bowls, and other utensils.

**hibernate** (hi' bar nat). To spend part of the year sleeping, or dormant. **irrigation** (ir' a gā' shan). Supplying land with water.

**lava** (lä' va). The hot, melted rock that flows out of a volcano.

**livestock** (liv' stok). Farm animals.

**mine** (mīn). A large hole dug in the earth to get out coal, salt, gold, or anything valuable.

**mineral** (min' ə r ə l). Anything that is not a plant, animal, or other living thing. Usually a valuable rock or liquid taken from the earth

**modern** (mod' ə r n). Of the present time or times not long ago.

**moisture** (mois' chər). Water spread in very small drops in the air or on a surface.

**Moslem** (moz' ləm). A believer in the religion of Islam.

**nomad** (nō' mad). A member of a tribe that moves from place to place to find food, or pasture for its animals.

**oasis** (ō ā' sis). A place in the desert where water is found.

**ornament** (ôr' nə mən t). Something that adds beauty.

**plain** (plān). A flat stretch of land.

**preserve** (pri zér v'). To prepare food to keep it from spoiling.

**riverbed** (riv' ə r bed'). The channel in which a river flows.

**rodent** (rōd' nt). Any of a group of animals with large front teeth that are used for gnawing. Includes rats, mice, and squirrels.

**Sahel** (sä hel'). An area south of the Sahara Desert that has periods without enough rain for crops and pasture.

**scenery** (sə' nə r ē). The general appearance of a place.

**sparse** (spärs). Thinly scattered; occurring here and there.

**surround** (sə round'). To be on all sides of; enclose.

**traditional** (trə dish' ə nəl). A way of behaving or living that is taught to children by their parents for many generations.

**Tropic of Cancer** (trop' ik uv kan'sər). An imaginary line north of the equator that marks the northern boundary of the tropical zone.

**Tropic of Capricorn** (trop' ik uv kap' rə kôrn). An imaginary line south of the equator that marks the southern boundary of the tropical zone.

**unique** (yü nēk'). Being the only one of its kind.

---

**Note:** These words appear in **boldface** print the first time they are used in this LIFE PAC. If you are unsure of the meaning when you are reading, review the definition.

**Pronunciation Key:** hat, āge, cāre, fār; let, ēqual, tērm; it, īce; hot, ōpen, ôrder; oil; out; cup, pūt, rüle; child; long; thin; /ʒh/ for then; /zh/ for measure; /ə/ represents /a/ in about, /e/ in taken, /i/ in pencil /o/ in lemon, and /u/ in circus.

Desert scene in Arizona, which is part of the Sonoran Desert. Saguaro Cacti are common in this type of desert.



burrow	evaporate	preserve
cactus	fog	rodent
dew	hibernate	Tropic of Cancer
domesticate	moisture	Tropic of Capricorn
dune	moisture	

**Review these words.**

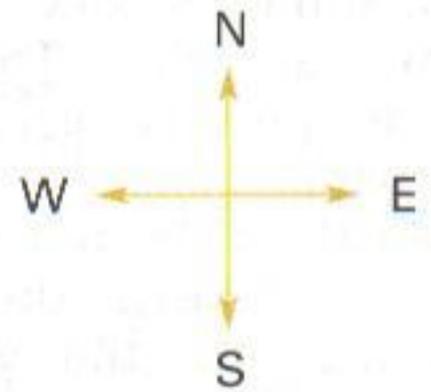
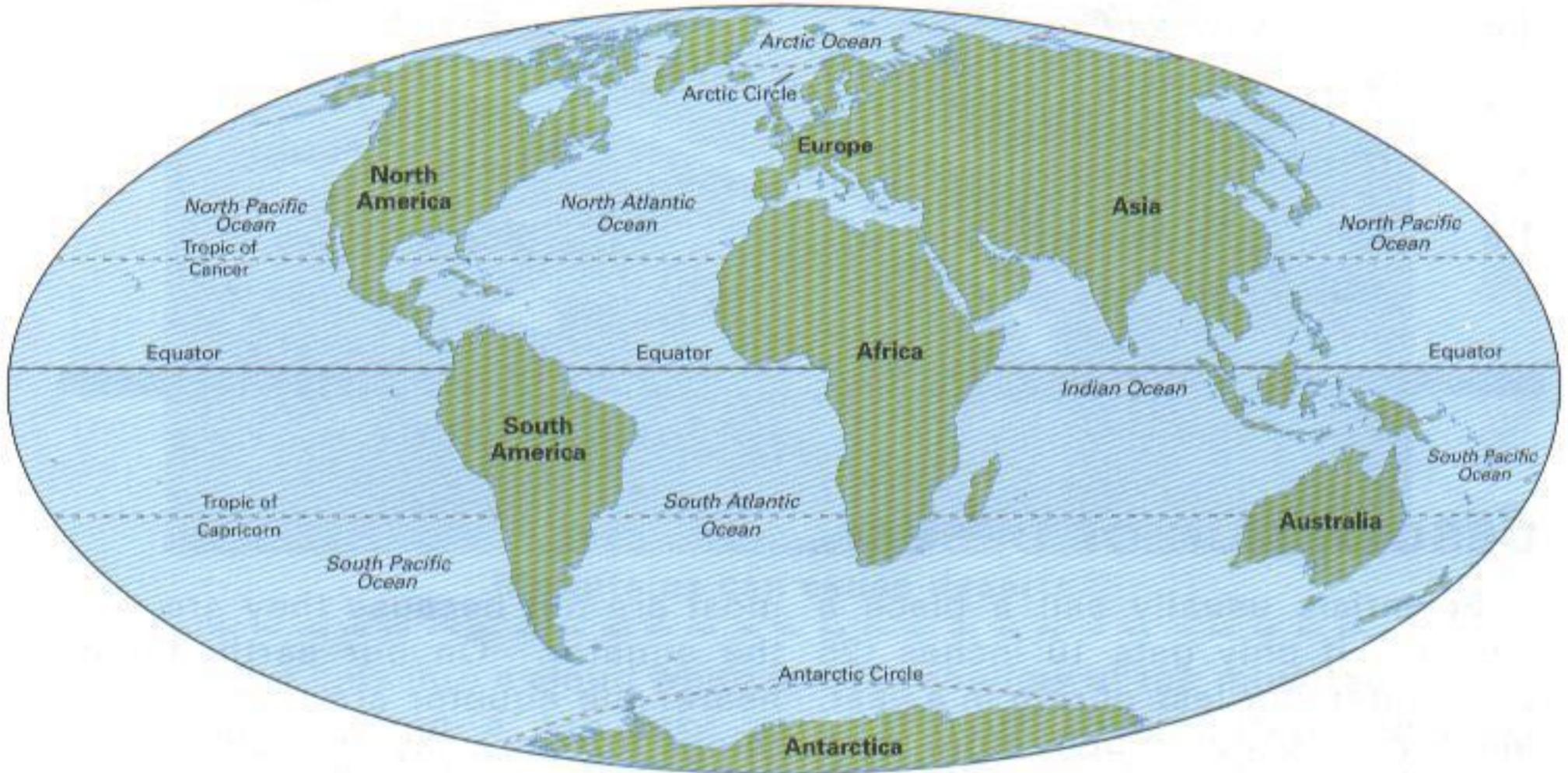
2. Know the continents and some map features.
3. Explain how moisture is blocked from reaching a desert.
4. Explain how plants and animals live in the desert.

**Review these objectives.**

A desert is a place where very little rain falls and very few plants grow. Most deserts are very hot, too. Very few plants and animals can live in a desert because of the heat and lack of food. Even in the desert, however, God has created life. Special plants and animals God put there to help them survive. They use the plants and animals God put there to help them survive.

## 1. WHAT IS A DESERT?

# Our World.



**Map hint:** The easiest way to learn directions is to remember that when you face north, south is behind you, east is towards your right hand, and west is toward your left. This works for east and west when you are looking at a map with north at the top, also.



Use the map to answer the following questions. Answer each with north, south, east, or west.

- 1.1 Antarctica is \_\_\_\_\_ of Africa.
- 1.2 The Pacific Ocean is on the \_\_\_\_\_ side of North America.
- 1.3 The Tropic of Cancer is \_\_\_\_\_ of the Equator.
- 1.4 Asia is \_\_\_\_\_ of Europe.
- 1.5 The Tropic of Capricorn is \_\_\_\_\_ of Asia.
- 1.6 The Indian Ocean is on the \_\_\_\_\_ side of Africa.

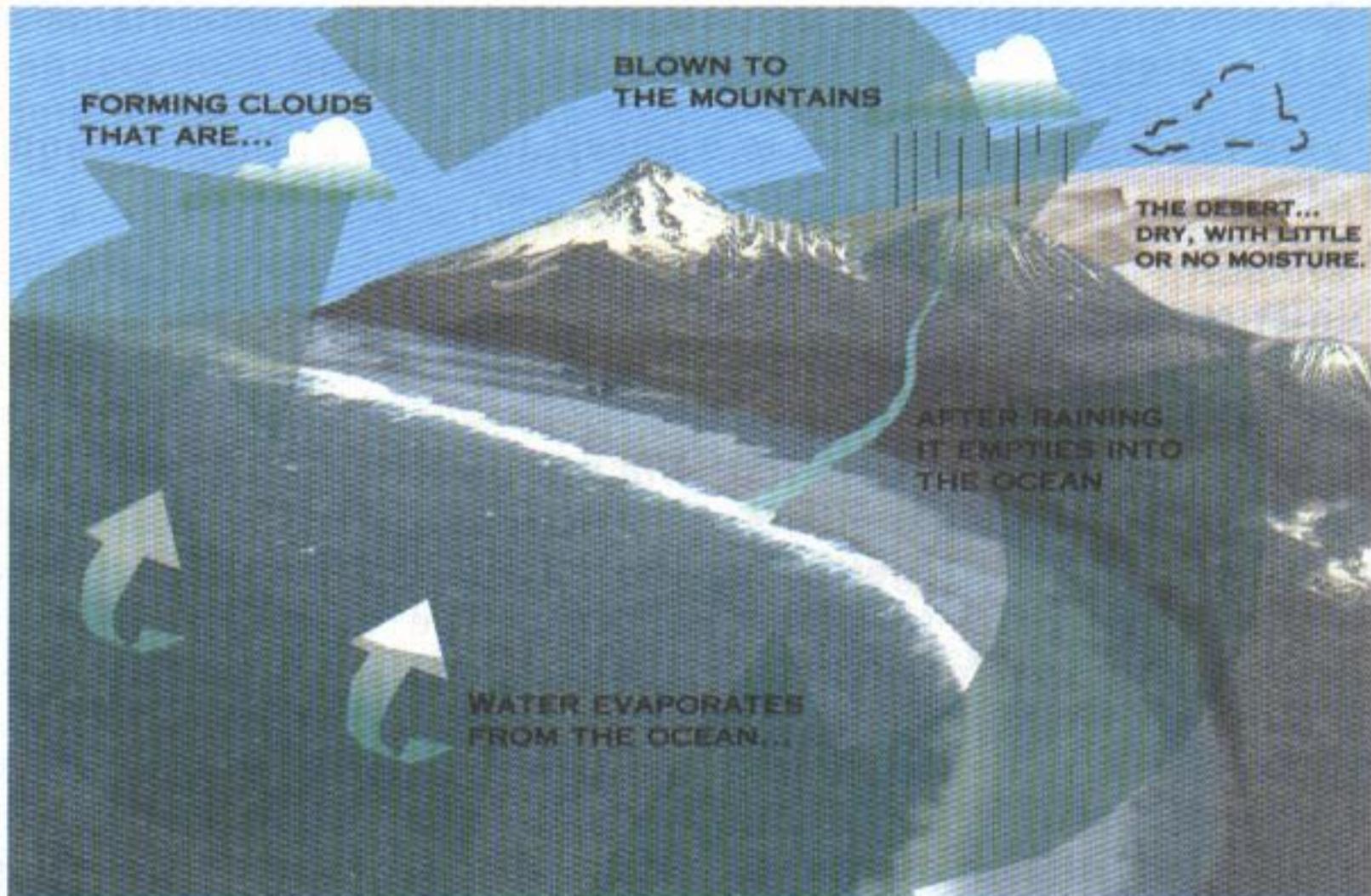
## DESCRIPTION OF DESERTS

Scientists usually call a place a desert if it only gets 10 inches (25 centimeters) or less of rain in a year. Most places get much more rain than that. For example, Chicago, Illinois gets 20 to 40 inches of rain a year, and New York City gets 40 to 60 inches a year. This lack of rain means there is very little **moisture** in a desert.

Moisture in the air acts like a blanket. It keeps the heat out in the daytime and the warm air in at night. The desert, however, does not have a moisture blanket. Therefore, deserts get very hot in the daytime and very cold at night. Deserts often change 25° or more between night and day, so a person might be wearing a T-shirt during the day but need a heavy coat at night.

Deserts can be cold or hot, but

most are hot because they are near the equator. On our earth, things nearer the equator are hotter, while things further away are cooler. The North and South Poles are cold because they are as far away from the equator as it is possible to be. Deserts form when something stops moisture from reaching that place. Moisture is carried by clouds. Usually mountains stop the clouds from bringing their rain to the desert. Also, as air moves around the earth it tends to create areas of high and low rainfall. The biggest areas of low rain are along the line of the **Tropic of Cancer**, north of the equator and the **Tropic of Capricorn**, south of the equator. (Remember: Capricorn is a bigger word and sinks to the bottom, or south).



### Mountains can cause deserts.

Moisture gets into a cloud when it **evaporates** from a big lake or ocean. The wind blows the clouds toward the mountains. The clouds have to go up and over the mountains to reach the desert on the other side, but the moisture in the clouds falls out as it gets cooler going up the mountain. Thus, by the time the clouds get to the other side of the mountain there is very little moisture left. In fact, often there is no cloud left at all. The desert is the

*rain shadow* of the mountain.

Without any moisture, very few plants can grow in the desert. Plants keep soil from being blown or washed away, so deserts are often covered with loose sand or rocks because much of the soil has been blown away. Strong winds can cause dust or sand storms that block out the sun and make it hard to see or breathe. Sometimes the sand can be blown into big piles like snowdrifts. These are called **dunes**.



#### Put the correct word in the blank.

- 1.7 Very little rain falls along the Tropic of \_\_\_\_\_ or the Tropic of \_\_\_\_\_.
- 1.8 A desert usually receives \_\_\_\_\_ or less inches of rain in a year.
- 1.9 Deserts are often covered with loose sand or \_\_\_\_\_.

- 1.10 Deserts are often found behind mountains in the mountains' \_\_\_\_\_.
- 1.11 Very few animals can live in a desert because of the heat and lack of \_\_\_\_\_.
- 1.12 Moisture in the air acts like a \_\_\_\_\_, keeping heat in at night.

## LIFE IN THE DESERT

People and animals can live in the

desert if there are enough plants.

Some parts of the desert get only

one inch of rain in a year. No plants

can live there. Other parts of the

desert get enough rain for special

desert plants to grow. People and

animals can use these plants to

survive.

**Desert plants.** God created

very special plants that can live in a

desert. These plants were created

to use the little moisture of the

desert very carefully, so most

deserts are not big, empty piles of

sand. Usually there are plants,

often many plants. They grow far

apart so they don't have to share

any moisture.

God thought of many ways to help plants survive in the desert. All plants collect water through their roots. Some desert plants have roots that spread way out to get all the water they can when it rains. Other plants put down very deep roots to reach water under the ground. Some plants have leaves that collect **fog** or **dew** and drop the moisture for their roots to get. Other plants grow from seeds only when it rains. They grow, produce seeds, and die quickly. Their seeds

will not grow until the next rain. The desert plant most people know about is the **cactus**. They are found in the deserts of North and South America. A cactus does not have leaves like a tree because moisture evaporates from leaves. Instead, cacti are covered with a waxy coating that keeps moisture inside. The inside of a cactus is like a big sponge. When it does rain, the cactus soaks up the water and stores it to use when it is dry. The cactus is covered with sharp spines or needles to keep animals from getting the water inside.



Cactus.

There are many kinds of cacti. The saguaro may grow to be 60 feet (18 meters) tall and has arms that make it look like a person being held up by a robber. The prickly pear cactus grows small, paddle-shaped arms and a pear-shaped fruit that is good to eat. The barrel cactus is shaped like a barrel and covered with hard, curved spikes. Cacti grow beautiful flowers for a very short time when there is enough rain.

The mesquite is another desert plant. It is a small tree which sends its roots deep into the soil to collect every bit of water it can find. It has small, waxy leaves that do not lose much moisture. Some animals can eat the leaves. People can use the wood for fuel and to build things. They also grind the mesquite beans into flour to use for food.

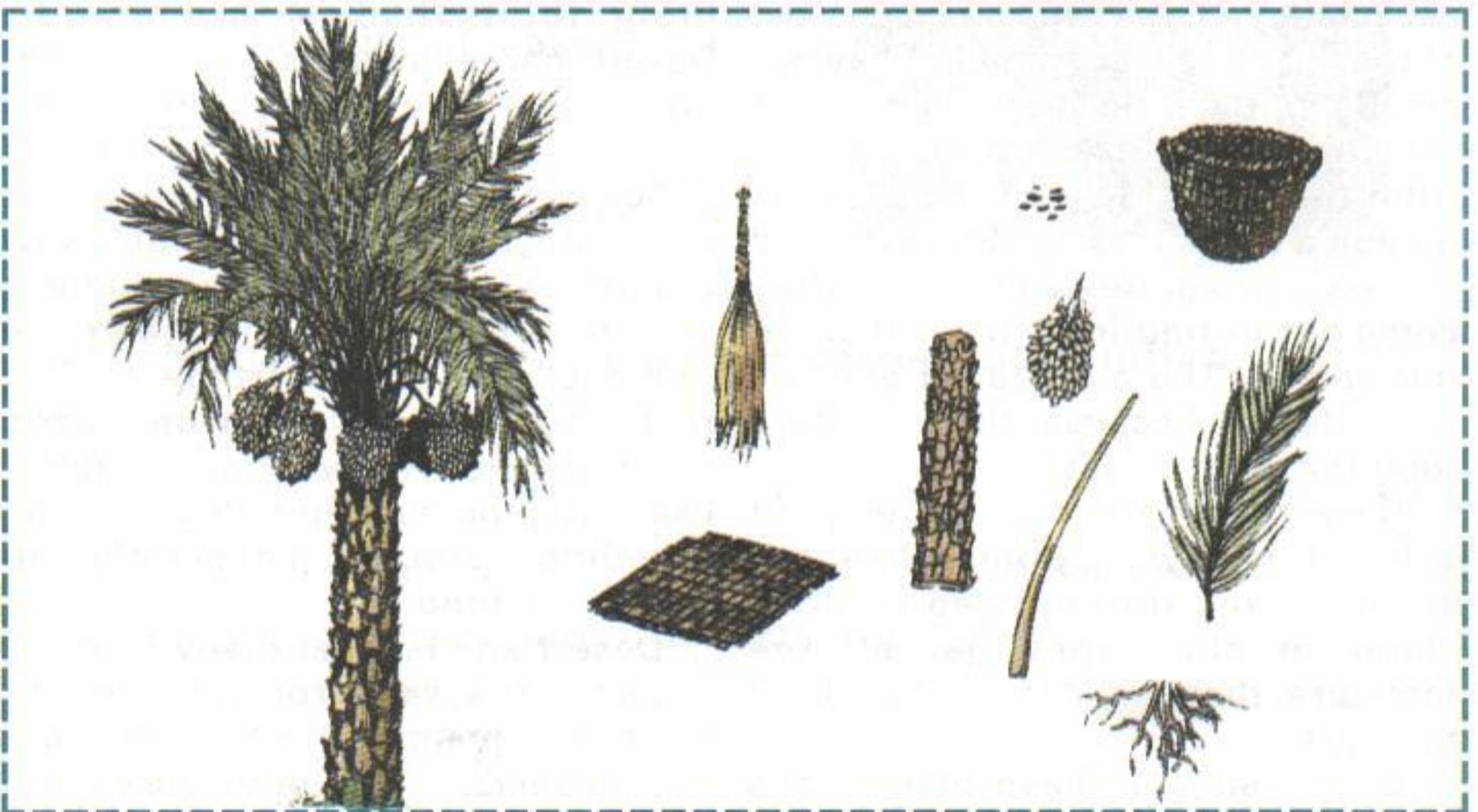
Another useful desert plant is the date palm. It grows in the deserts of northern Africa and western Asia.

Date palms grow near a source of water called an **oasis**. They can be used for food, shade, and fuel for fires.

Dates are the food grown by the palm trees. They are a very sweet fruit. They are easy to dry and **preserve**. They can be pressed into cakes which are easy for travelers to carry. Dates are an important source of food for the desert people.

People can also use other parts of the date palm. The leaves can be used to make baskets or mats. Rope can be made from the bark. The tree can be used to build shelters. Even the pits from the dates can be used as fuel for a fire or food for animals.

God cleverly made many plants that can grow in the desert by making good use of the little moisture there. Thus, God provides for men and animals even in the driest places.



**The Date Palm Tree and Its Uses.**

**Desert animals.** Many wild animals make their homes in the desert. God created these animals especially to live in the desert. Most of these animals are small. They are small so they do not need much food and they can easily find shade from the sun. Most of the animals hide in a **burrow** or under rocks and shrubs during the daytime. They come out to find food at night when it is cooler. There are fewer animals in a desert because there is less food for them to eat.

Desert animals can go without water for days. Some, like the kangaroo rat, do not need to drink water at all. They get all the moisture they need from the food they eat.

Desert animals have many ways to live in their harsh home. The sandgrouse, an African desert bird, can soak up water in its feathers to bring to its babies in the nest. Desert hares have large ears that take extra heat away from their bodies. A desert chameleon in Africa turns white in the hottest part of the day, to reflect sunlight away. A tortoise in Asia is active only a few months of the year, when the rain has made the desert green. The rest of the year it **hibernates** underground. Many bigger animals, like antelope and gazelles, live by traveling around constantly to search for food.

Desert animals eat many kinds of things. The kangaroo rat lives on seeds and plants. The horned lizard eats insects. The rattlesnake and

See if someone in your class can bring in some dates for the class to eat. Discuss the taste. Talk about what it would be like to eat dates every day.

**Do these activities.**



- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

**Name four ways God made plants able to live in a desert.**



- 1.13 \_\_\_\_\_ cactus
- 1.14 \_\_\_\_\_ mesquite
- 1.15 \_\_\_\_\_ date
- 1.16 \_\_\_\_\_ palm leaves
- a. make baskets or mats
- b. puts down deep roots
- c. sweet fruit
- d. inside like a sponge

**Match these words with the correct description.**



1.17

the coyote hunt small **rodents** and rabbits that live in the desert. So, there is food in the desert. It is just hard to find.

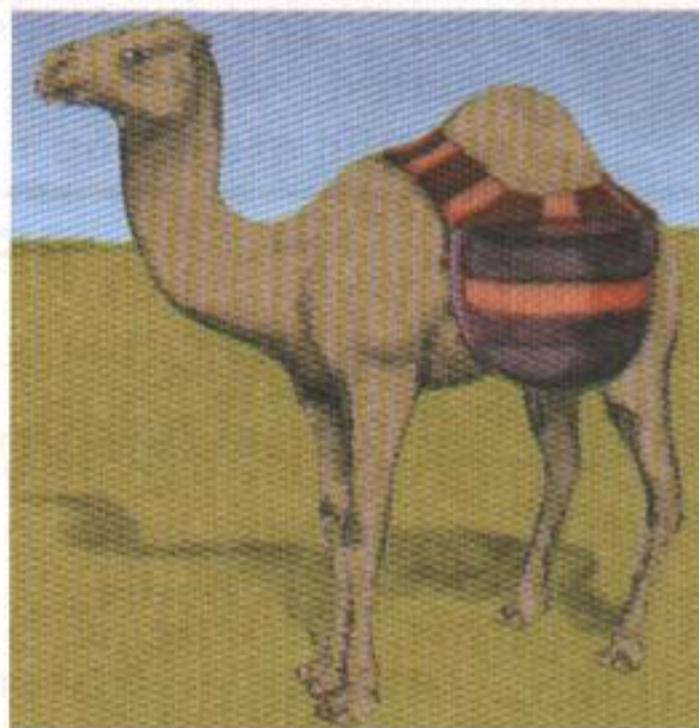
The most useful desert animal is the camel. The camel is a **domesticated** animal that comes from Africa and Asia. People use them to carry heavy loads across the desert. The camel was created by God to survive in the desert.

Camels have wide hoofs that allow them to walk on top of sand. Their nostrils are small slits which can be closed to keep out sand during a storm. They also have extra eyelids, and hair covering their ears, to keep out the sand. They have big humps on their backs which store fat, so they can go many days without eating. They do not need much water, either, because they can get moisture from the food they eat, and they do not lose much moisture by sweating. The camel can also store a lot of water in its stomach.

Desert people used the camel for food. They ate its meat and drank its milk. Its hide and hair were used

for clothes, blankets, and leather goods.

Camels can carry heavy loads of up to 400 pounds (180 kilograms), but they do not like to work. They will bite, kick, or spit at people when they are mad, but desert people needed and used them anyway. The camel is called the "ship of the desert," because it carries things back and forth across the desert as ships do on the sea. The camel was a very useful animal for people who lived in the desert before the invention of cars and trucks. Even today, camels can cross deserts without the roads trucks need. Then again, the trucks do not bite!



**Match these words with the correct description.**

- |      |                     |   |
|------|---------------------|---|
| 1.18 | _____ kangaroo rat  | a. eats insects                               |
| 1.19 | _____ camel         | b. carries water to the nest in its feathers  |
| 1.20 | _____ antelope      | c. drinks no water, eats seeds                |
| 1.21 | _____ horned lizard | d. domesticated                               |
| 1.22 | _____ sandgrouse    | e. moves around constantly to search for food |
| 1.23 | _____ coyote        | f. eats rodents and rabbits                   |

_____	1.01	Camels are gentle animals, easy to work with.
_____	1.02	Desert hares have large ears that carry away heat from their bodies.
_____	1.03	Cacti are covered with poison to keep animals from eating them.
_____	1.04	Some desert plants grow and produce seeds quickly after a rain.
_____	1.05	Strong winds in the desert cause dust or sand storms.
_____	1.06	Deserts are always hot.
_____	1.07	Desert plants are just like plants in wetter places.
_____	1.08	Food is hard to find in the desert.
_____	1.09	Desert plants do not produce food people can eat.
_____	1.010	Desert people ate camel meat.

**Answer true or false** (1 point each answer).

## SELF TEST 1

Review the material in this section to prepare for the Self Test. The Self Test will check your understanding of this section. Any items you miss on this test will show you what specific areas you need to review.



Teacher check \_\_\_\_\_  
Initial \_\_\_\_\_  
Date \_\_\_\_\_

1.25 Find a book about deserts and choose a desert animal from it. (Not a camel). Write a report on that animal.



**Do this activity.**

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_

1.24

List some of the things that make the camel the "ship of the desert."



**Match these items** (2 points each answer).

- |       |                    |   |
|-------|--------------------|---|
| 1.011 | _____ cactus       | a. eats rodents and rabbits                         |
| 1.012 | _____ date palm    | b. moves to find food                               |
| 1.013 | _____ kangaroo rat | c. has an inside like a sponge                      |
| 1.04  | _____ oasis        | d. to change from liquid to gas                     |
| 1.05  | _____ antelope     | e. a hill of sand piled up by the wind              |
| 1.016 | _____ mesquite     | f. produces fruit and leaves for mats               |
| 1.017 | _____ dune         | g. eats seeds, does not need water                  |
| 1.018 | _____ burrow       | h. hole in the ground, animal's home                |
| 1.019 | _____ rattlesnake  | i. small desert tree with deep roots                |
| 1.020 | _____ evaporate    | j. a green place in the desert where there is water |

**Fill in the blank with the correct word from the list** (3 points each answer).

roots	Cancer	Capricorn
fog	Equator	saguaro
rocks	blanket	prickly pear
moisture	mesquite	

- 1.021 The line of low rainfall north of the equator is the Tropic of \_\_\_\_\_.
- 1.022 The line of low rainfall south of the equator is the Tropic of \_\_\_\_\_.
- 1.023 Name two kinds of cactus: \_\_\_\_\_ and \_\_\_\_\_.
- 1.024 Moisture in the air acts like a \_\_\_\_\_ to keep a place warmer at night.
- 1.025 Places on earth are hotter as you get closer to the \_\_\_\_\_ and cooler as you get further away.
- 1.026 Deserts are covered with loose sand or \_\_\_\_\_.
- 1.027 Some desert plants collect \_\_\_\_\_ on their leaves, which drops to their roots.



Possible Score 80

Teacher check \_\_\_\_\_

Initial \_\_\_\_\_

Date \_\_\_\_\_

My Score \_\_\_\_\_

- 1.028 Deserts form when something stops \_\_\_\_\_  
from reaching that place.
- 1.029 Desert plants sometimes have deep or spread out \_\_\_\_\_  
to find water.
- Answer these questions (5 points each answer).**
- 1.030 What does it mean to say that a desert is in the rain shadow of a  
mountain?
- 1.031 Name three ways the camel was created by God to be the "ship of  
the desert."
- 1.032 What is a desert?
- 1.033 What is there for animals to eat in the desert?

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## II. WHERE ARE THE DESERTS?

Deserts exist all over the world. Europe is the only **continent** that does not have a desert. The map below shows the important deserts of the world.

In this section you will learn about these deserts. You will learn

where they are, why they are deserts, and what they are like. Each desert is **unique**, just as each person is unique. Our wonderful God never makes anything in his creation the same way twice.

### Review these objectives.

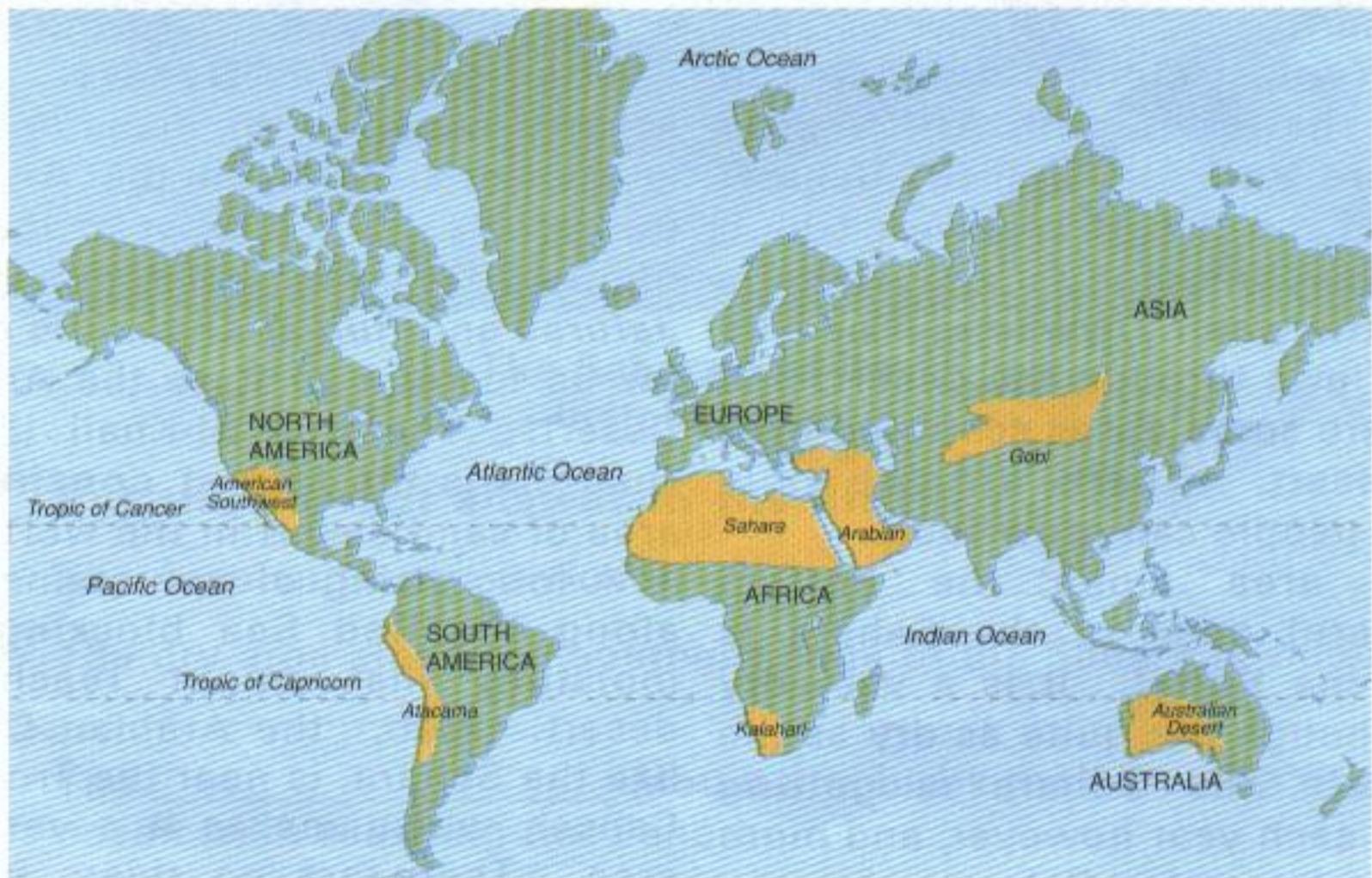
1. Locate seven of the great deserts of the world on a map.
2. Know the continents and some map features.
3. Explain how moisture is blocked from reaching a desert.
5. Describe seven of the major deserts of the world.

### Review these words.

Arabian Peninsula  
altitude  
barren  
coast  
continent  
continuous

export  
fertilizer  
gorge  
lava  
livestock  
mineral

plain  
riverbed  
Sahel  
scenery  
surround  
unique



Seven of the World's Great Deserts

Key  = Desert



Map exercises. Name the desert(s) on each continent.

2.1	North America:	_____
2.2	South America:	_____
2.3	Africa:	_____
	a.	_____
	b.	_____
2.4	Asia:	_____
	a.	_____
	b.	_____
2.5	Australia:	_____
2.6	Europe:	_____

## Deserts of the Northern Hemisphere

### The Sahara Desert.

The Sahara Desert of North Africa is the world's largest desert. It is almost the same size as the United States. The Sahara touches ten different countries in Africa. The name, *Sahara*, comes from the Arabic word for desert.

The Atlas Mountains that run along the **coast** of Africa stop moisture from reaching the Sahara. Most of the desert is covered with bare gravel or sand dunes. There is very little water anywhere. The Nile River flows through the desert, and there are some oases scattered over the desert. These are the only places people can grow food.

The area along the bottom (southern) edge of the Sahara is called the **Sahel**. It is a very dry area, though not quite as dry as the Sahara. The Sahara is getting bigger each year however, and more Sahel is becoming Sahara.

### The Arabian Desert.

Oil has been found under some countries in the desert. This is pumped up and sold to make money for those countries. Most of the other countries of the Sahara are very poor because they do not have good land to grow food for people or their **livestock**.

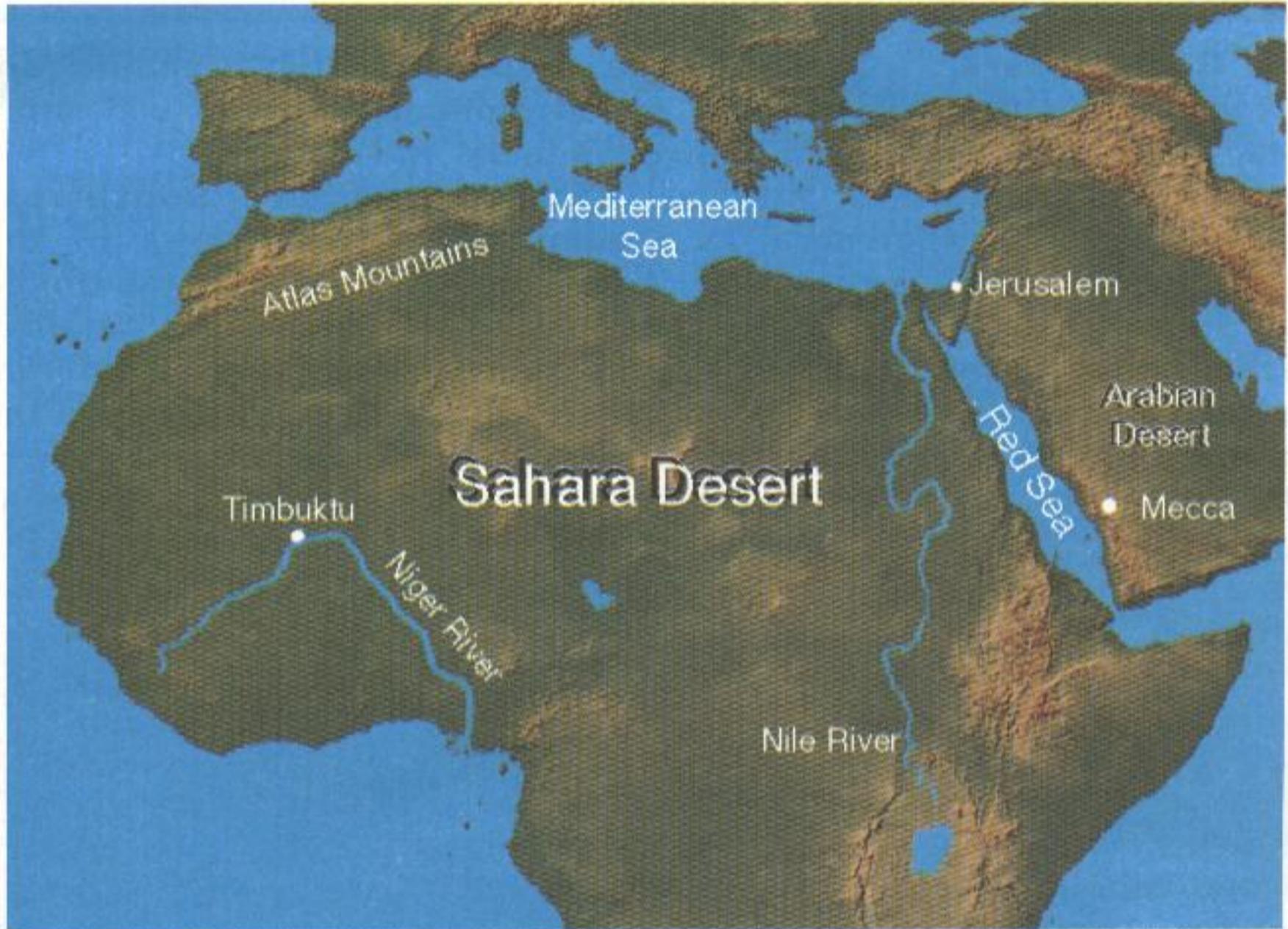
The **Arabian Desert**. The Arabian Desert is the name used for all of the deserts on the **Arabian Peninsula**. Since most of the real names are Arabic, such as *Al Jafurah* and *Rub al-Khali*, it is easier for us to refer to it as the Arabian Desert. The Rub al-Khali (Empty Quarter) is the largest **continuous** area of sand desert in the world.

A long string of mountains runs along the Red Sea blocking any moisture that might reach the desert. Also, the Arabian Desert, like the Sahara, is near the Tropic of Cancer, which makes it a very dry area. There are no rivers in this

desert. There are many dry **riverbeds**, called *wadis*. When it does rain, it rains very hard, and the *wadis* fill up with water for a little while.

However, the Arabian Desert is a very rich place. It is rich in oil. The biggest nation in the desert, Saudi

Arabia, **exports** more oil than any other nation on earth. The other nations also have large amounts of oil they sell. Many of these countries have become very rich because of the oil under their deserts.



---

### The Sahara and its neighbors.

---



**Put the correct answer in the blank.**

- 2.7 The Arabian Desert is rich in \_\_\_\_\_ .
- 2.8 The dry area along the southern edge of the Sahara is called the \_\_\_\_\_ .
- 2.9 The \_\_\_\_\_ Mountains block the moisture of the ocean from reaching the Sahara.
- 2.10 Dry Arabian riverbeds are called \_\_\_\_\_ .

2.11 The largest continuous area of sand desert in the world is called \_\_\_\_\_.

2.12 The Arabian and Sahara Deserts are on the Tropic of \_\_\_\_\_.

2.13 The \_\_\_\_\_ is the largest desert in the world.

2.14 The \_\_\_\_\_ River flows through the Sahara.

### The Gobi Desert.

The Gobi Desert is in the country of Mongolia called Mongols and you will study them later.

will study and the furthest north.

The Gobi Desert is as far north as

New York and Michigan in the

United States.

Because it is a desert, it gets very

hot in the summer and because it is

so far north, it gets very cold in the

winter. It can get to 110°F in the

summer and 40°F below zero in the

winter. That is a change of 150°F

from summer to winter!

The Gobi is **surrounded** by

mountains on three sides. The

mountains block so much moisture

that only about eight inches of rain

fall in a year. There are a few rivers

that flow into the Gobi from the

mountains. These often do not flow

all year and dry up quickly after they

reach the desert. There is some

water underground that can be

reached by digging wells, but there

are no oases in the Gobi.

The center of the desert is the

most **barren** place. It is covered

with hard-packed, stony ground and

smaller areas of sand. Around that

are dry, grassy **plains** called

*steppes*. Animals that eat grass can

live on the steppes. The people of

the Gobi live by raising livestock on

the steppes. These people are

called Mongols and you will study

them later.

**The American Southwest**

**Desert.** The desert area of the

American Southwest is in the United

States and Mexico in North America.

This area includes several different

deserts that together are called the

American Southwest Desert.

A long chain of mountains runs

all the way from Alaska to the

Antarctic Ocean, along the western

sides of North and South America.

In the United States and Canada

they are the Rocky Mountains. In

Mexico, they call them the Sierra

Madre Mountains. In South America,

they are called the Andes

Mountains. Just north of the Tropic

of Cancer, the deserts of the

American Southwest are located

around the Rocky Mountains.

Many of the American deserts are

mixed in with the mountains that

stop their moisture. This makes for

beautiful **scenery** where the

colorful mountains rise out of the

deserts. The Colorado, or Painted,

Desert is especially beautiful,

because of the different colors of

the layers of rock in the mountains.

The change in **altitude** can be very

great. The Mojave (mō hā' ve)

Desert can be as high as 5,000 feet above sea level and goes as low as 492 feet below sea level. That is the lowest spot in North America, called Death Valley.

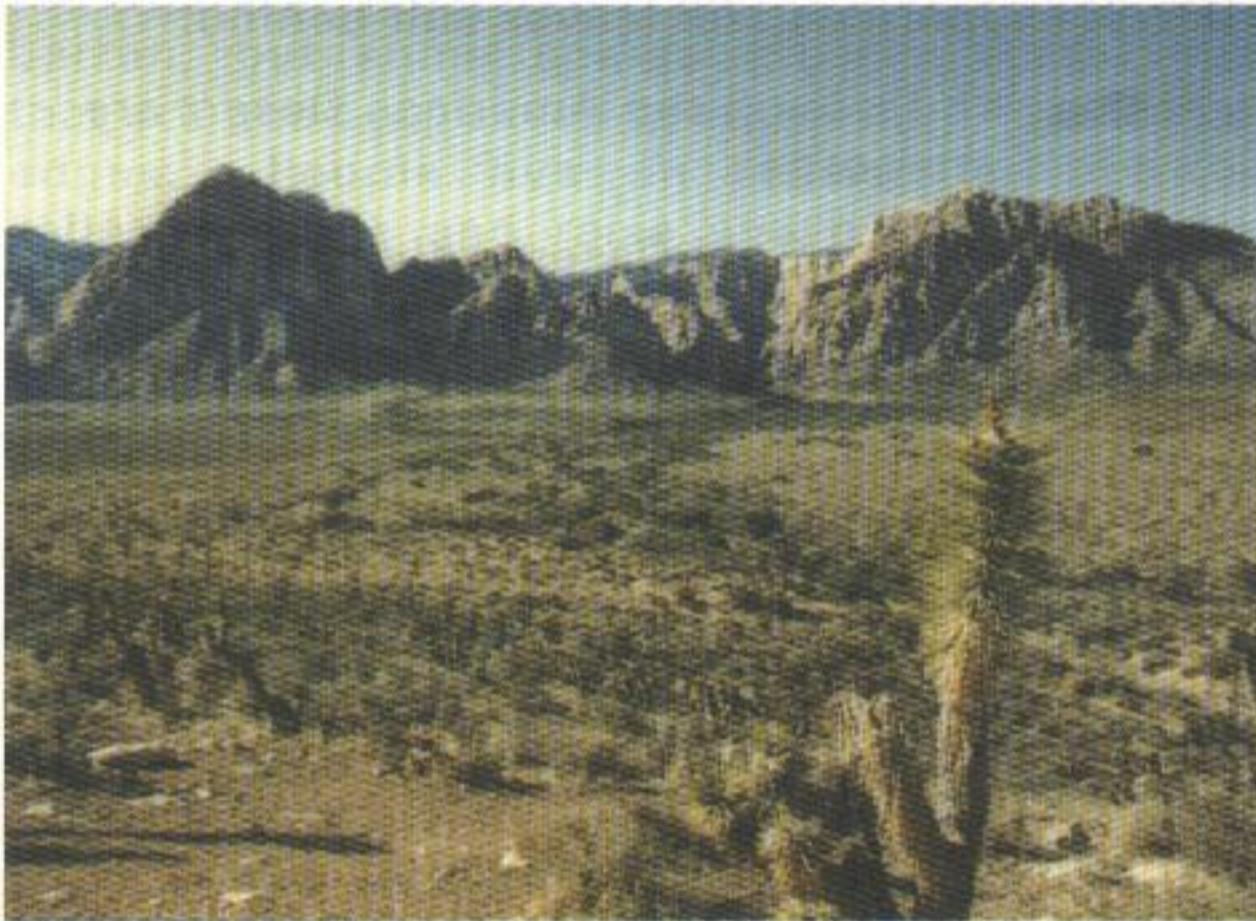
The Great Basin is the largest desert that is only in the United States. The Great Basin is a group of bowl-like valleys surrounded by mountains. Water that flows into the Great Basin cannot get back out again. The Great Salt Lake in Utah is in the bottom of one of these bowls. It is salty because the water cannot leave. It can only evaporate and leave salt behind, just like the ocean.

Many rivers run through the

American Desert. These rivers provide water for men and animals. The rivers often are in a deep **gorge**, like the Grand Canyon around the Colorado River in Arizona. The Colorado River is the biggest river of the American deserts.

#### **Other Northern Deserts.**

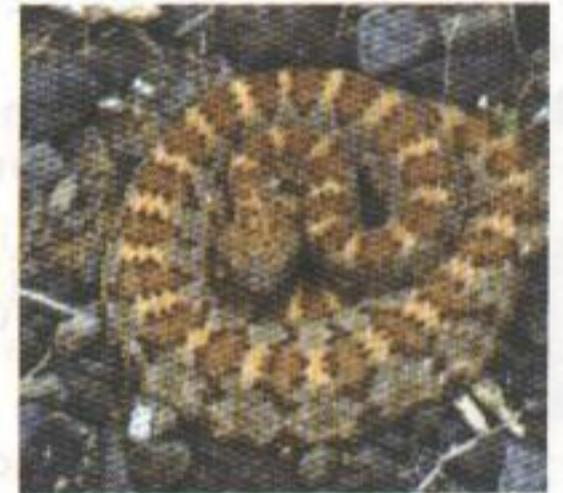
There is also a string of Asian deserts between the Arabian Desert and the Gobi Desert in the Northern Hemisphere. They have very difficult names and you do not have to learn them. There is another desert called the Thar which is along the border between India and Pakistan in Asia.



**Red Rock Canyon, Nevada is part of the Mojave Desert. Notice a Joshua Tree in the foreground.**



**Scorpions are common insects of the desert.**



**A desert rattlesnake.**



**Desert Hare**

**The Kalahari Desert.** The sides. Only the north, which is right on the Tropic of Capricorn. It is blocked by mountains. Very deep, red sand covers most of the country of Botswana. It is shaped like a bowl of the desert. The north and west set high up in the mountains that have large plains where many kinds of plants grow. The desert gets rain surround it. The mountains block the Kalahari from the ocean on three when the wind blows from the

## Deserts of the Southern Hemisphere

- 2.15 The mountains that run along the west coast of the Americas are called the \_\_\_\_\_ in the United States and \_\_\_\_\_ in Mexico, and the \_\_\_\_\_ in South America.
- 2.16 The lowest spot in North America is \_\_\_\_\_.
- 2.17 The grassy plains of the Gobi Desert are called \_\_\_\_\_.
- 2.18 The \_\_\_\_\_ Desert is along the border between India and Pakistan.
- 2.19 The Gobi Desert is in the country of \_\_\_\_\_.
-  **Answer true or false.**
- 2.20 The Gobi Desert is in Europe.
- 2.21 The Great Salt Lake is salty because the water that comes into it evaporates and leaves salt behind.
- 2.22 The rivers that run through the American Desert are often down in deep gorges.
- 2.23 The temperature in the Gobi Desert only changes about 30° in a year.
- 2.24 The Gobi Desert is further north than the Sahara Desert.
- 2.25 The center of the Gobi Desert is a big oasis.
- 2.26 The Colorado River flows through the American Southwest Desert.
- Put the correct word in the blank.** 

Indian Ocean bringing moisture.

The plains of the Kalahari get more rain than most deserts. Parts can get as much as 18 inches in a year. It is a desert because there is very little water on top of the ground. You can count on your fingers the water holes that have water all year. When it does rain, the water goes into large, flat areas called pans until it evaporates. These pans are very important sources of water for the animals of the desert.

**The Australian Desert.** Most of the center part of the nation/continent of Australia is desert. It is right on the Tropic of Capricorn. The center area is called the Outback. Most of it is sandy and barren, but some sparse grasses that are good for sheep grow on the edges. People live on ranches called stations and raise sheep in the Outback.

The moisture that might reach the desert from the Pacific Ocean is stopped by the Great Dividing Range. The Dividing Range is a line of mountains along Australia's east coast.

There are several empty "lakes" in the Australian Desert. They are called *playas*. These fill up with water when there is a time of heavy rain and become genuine lakes for a short time. Fish are washed into the lake, and these attract birds and other animals. Then, the lake dries up, the fish die, and the birds leave—until the next heavy rain, when the cycle begins again. The largest *playa* is named Lake

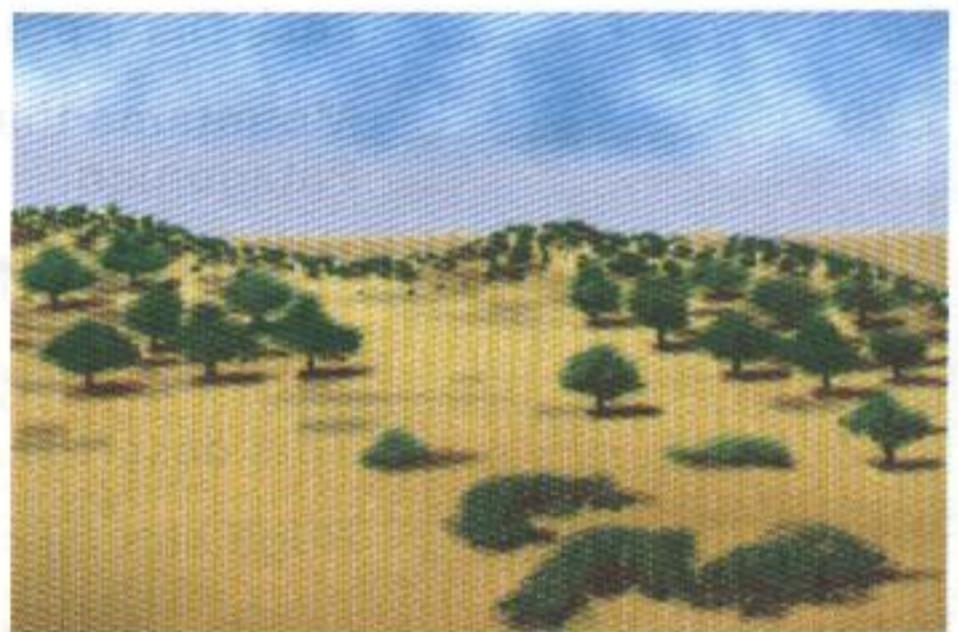
Disappointment. Why is that a good name?

The *playas* and little holes that catch rainwater are the only sources of water on top of the ground. These will all dry up a little while after the rain. The only other place to get water is from wells dug to reach water under the ground.

**The Atacama Desert.** The Atacama Desert is on the Tropic of Capricorn in Chile, South America. The Atacama is one of the driest places on earth. In some places it may rain less than an inch every ten years. There are very few plants or animals in this desert.

The Atacama is an unusual desert. It is not blocked off from the ocean by mountains. It is in the Andes Mountains right next to the Pacific Ocean! The ocean is the reason it is a desert.

Cold water from Antarctica flows up along the **coast** of South America. The cold water makes the air over the ocean cold, too. That cold air loses its moisture, just the same as it does when it gets cold going up a mountain. Thus, the air that reaches the coast has almost no



**The Kalahari desert.**

moisture left; so only fog reaches the coast, not rain. Several rivers flow into the desert from the mountains. Only one of the rivers, the Loa, reaches the ocean. The other rivers dry up in the desert. There is also water in the rocks and dirt under the desert. This is called the Pica **Aquifer**. The Atacama is covered with sand, cooled **lava**, and huge salt lakes. The salt lakes are called **salars**. These are large lakes where water has come in, cannot get out, and is evaporating away. The salt and other **minerals** left behind change the water to many beautiful colors. **Salars** can be blue, green, gray, and even pink!

The Atacama is rich in minerals. It has more sodium nitrate than any other place on earth. Sodium nitrate is used to make bombs and **fertilizer**. Copper, an important metal, and other minerals are also found in the desert.

**Other Southern Deserts.** There are two other big deserts in the Southern Hemisphere. The Namib Desert is in southern Africa on the west coast. Its name means "an area where there is nothing." It is a desert for the same reason as the Atacama. The cold ocean current from Antarctica also keeps moisture from reaching this coast, except as fog.

The Patagonian Desert is at the southern end of Argentina on the east side of South America. It is the largest desert in the Americas. It is not on the Tropic of Capricorn. The winds always come from the west, over the Andes Mountains, so all their moisture is gone by the time they reach the desert.

Put the correct word on the line from the list below.



pans  
playa  
Pica

Andes

Australian

hemisphere

Patagonian

salars

2.27  
2.28  
2.29  
2.30  
2.31  
2.32  
2.33  
2.34

The aquifer under the Atacama Desert.

Lake Disappointment is the largest.

Mountains that block moisture from reaching the Patagonian.

One half of the earth.

This desert is not on the Tropic of Capricorn.

This desert is on a continent that is also a country.

Huge salt lakes in the Atacama Desert.

Large, flat areas in the Kalahari that collect water after a rain.



**Answer the following questions.**

2.35

What stops moisture from reaching the Namib and Atacama Deserts?

---

---

---

---

2.36

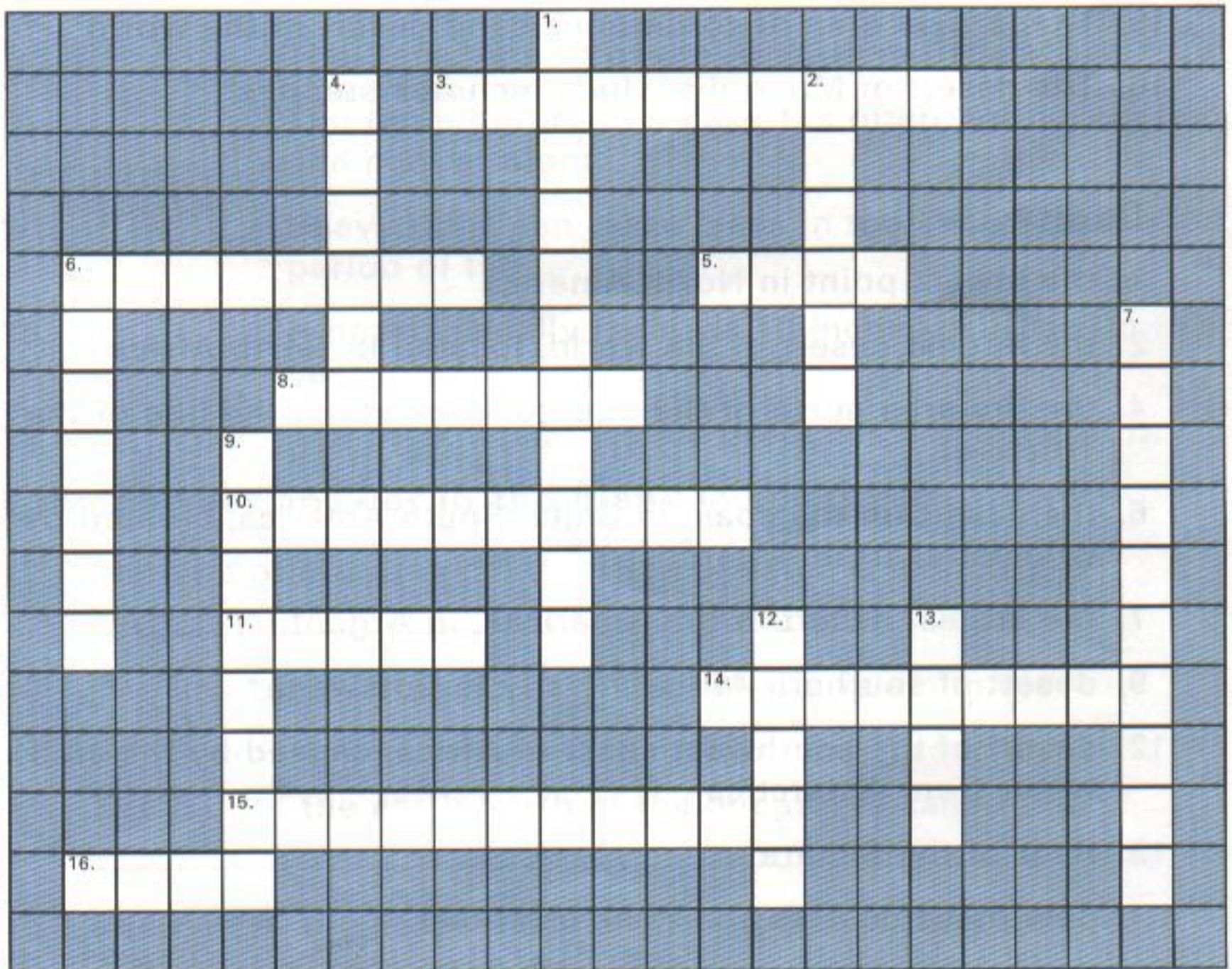
The Kalahari receives more rain than most deserts. Why is it still called a desert?

---

---



**This puzzle will help you review.**



Across

Put the correct answer in the spaces on the puzzle.

3. the Great Salt Lake is here, largest desert located only in the United States
  5. along the border of India and Pakistan
  6. North America's deserts are together called the \_\_\_\_\_ Southwest Desert\*
  8. a desert rich in oil in southwest Asia that has no rivers, only *wadis*\*
  10. the \_\_\_\_\_ Desert is on the only continent that is also a country\*
  11. these mountains block moisture from reaching the Sahara
  14. the dry area south of the equator runs along the line of the Tropic of \_\_\_\_\_
  15. The largest area of continuous sand desert in the world
  16. The desert of Mongolia which includes *steppes*\*
- Down
1. the lowest point in North America
  2. the largest desert in the world, located in North Africa\*
  4. the dry area north of the equator runs along the line of the Tropic of \_\_\_\_\_
  6. the desert on the coast in Chile, South America, created by cold water from Antarctica\*
  7. the largest desert in the Americas, in Argentina
  9. desert of southern Africa, mostly in Botswana\*
  12. desert of the southwest coast of Africa, caused by the cold water from Antarctica
  13. river of the Sahara
- \* Know these deserts and their locations.



Review the material in this section to prepare for the Self Test. The Self Test will check your understanding of this section. Any items you miss on this test will show you what specific areas you need to review.

## SELF TEST 2

**Answer true or false** (1 point each answer).

- 2.01 \_\_\_\_\_ Deserts are usually covered with sand or rocks.
- 2.02 \_\_\_\_\_ Water only comes into the Great Salt Lake in Utah; it never goes back out.
- 2.03 \_\_\_\_\_ Dunes are piles of sand blown by the wind.
- 2.04 \_\_\_\_\_ Desert plants are just like plants in wetter places.
- 2.05 \_\_\_\_\_ Most desert animals hunt for food when the sun is high so they can see better.
- 2.06 \_\_\_\_\_ There are never any rivers in a desert.
- 2.07 \_\_\_\_\_ The Sahel is part of the Australian Desert.
- 2.08 \_\_\_\_\_ The temperature in a desert is often hot during the day and cool at night.
- 2.09 \_\_\_\_\_ Heavy rains can make lakes in the desert for a short period of time.
- 2.010 \_\_\_\_\_ A desert usually receives 10 inches or less rain in a year.
- 2.011 \_\_\_\_\_ The prickly pear cactus produces an edible fruit.

**Put the correct answer in the blank** (4 points each answer).

- 2.012 The line of dry area south of the equator is along the \_\_\_\_\_.
- 2.013 The line of dry area north of the equator is along the \_\_\_\_\_.
- 2.014 The half of the earth north of the equator is called the \_\_\_\_\_.
- 2.015 The half of the earth south of the equator is called the \_\_\_\_\_.

**Match these items by putting the correct letter on the line (2 points each answer).**

- |       |       |              |   |
|-------|-------|--------------|---|
| 2.016 | _____ | antelope     | a. eats rodents and rabbits                         |
| 2.017 | _____ | cactus       | b. eats seeds, needs no water                       |
| 2.018 | _____ | livestock    | c. "ship of the desert"                             |
| 2.019 | _____ | aquifer      | d. farm animals                                     |
| 2.020 | _____ | mesquite     | e. a green place in the desert where there is water |
| 2.021 | _____ | camel        | f. moves constantly to search for food              |
| 2.022 | _____ | coyote       | g. grows fruit, fuel, and leaves for mats           |
| 2.023 | _____ | oasis        | h. inside like a sponge                             |
| 2.024 | _____ | date palm    | i. grows deep roots to get water                    |
| 2.025 | _____ | kangaroo rat | j. a large area of water under the ground           |

**Choose the correct word to complete each sentence (4 points each answer).**

- |         |       |  |
|---------|-------|--|
| Sahara  | _____ | Desert is along the west coast of                        |
| Arabian | _____ | Desert is in the United States.                          |
| Gobi    | _____ | Desert is in southwest Asia, on a peninsula rich in oil. |

- |       |  |
|-------|--|
| 2.026 | The _____ South America in Chile.                                  |
| 2.027 | The _____, the largest desert in the world, is in North Africa.    |
| 2.028 | The _____ Desert is in Mongolia, Asia.                             |
| 2.029 | Part of the _____ Desert is in the United States.                  |
| 2.030 | The _____ Desert is in southwest Asia, on a peninsula rich in oil. |
| 2.031 | The _____ is on the only continent that is also a country.         |
| 2.032 | The _____ is in Botswana in southern Africa.                       |

**Answer each question** (5 points each answer).

2.033 What is the "rain shadow" of a mountain?

---

---

---

2.034 What makes the Namib and the Atacama so dry despite the fact they are on the coast of an ocean?

---

---

---

---

2.035 Why are lakes found in a desert often salty?

---

---

---

2.036 Name three reasons a camel can live and work in the desert.

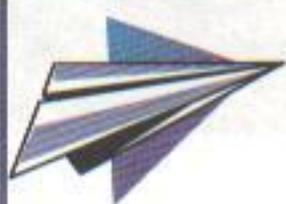
- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

2.037 Why is moisture like a blanket?

---

---

---



Possible Score 100

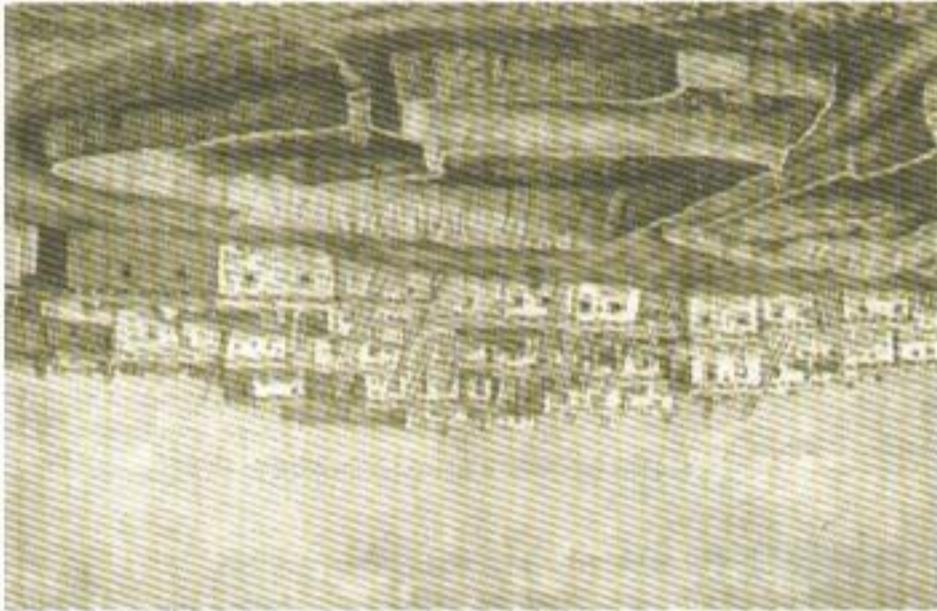
Teacher check \_\_\_\_\_

My Score \_\_\_\_\_

Initial \_\_\_\_\_

Date \_\_\_\_\_

Hopi Pueblo



Bedouins of Arabia, and the Mongols of the Gobi. Peoples who built villages near water sources included the Hopi and Navajo people

still live traditional ways today. Hunter/gatherers included the Aborigines of Australia and the Bushmen of the Kalahari and Namib Deserts. Nomads could be found in the Berbers of the Sahara, the

People who lived traditional lives in the desert can be divided into three groups. Hunter/gatherers lived by eating whatever they could find. **Nomads** lived by raising livestock and moving it to find food or water. Villagers built groups of homes and farms near sources of water and lived there. A few people

## Traditional Ways of Life

nomads	gourd	canal
ornament	irrigation	caravan
sparse	mine	climate
traditional	modern	crop
	Moslem	fertilizer

### Review these words.

6. Describe the traditional ways of life in the desert.
7. Know the names and locations of some desert people.
8. Explain how modern inventions help people to live in the desert.

### Review these objectives.

Many people live in the desert. Before **modern** times their life was very hard. Even today many people live in **traditional** ways in the desert. They must search hard for food and water. They must try to stay cool in the hot desert days and modern inventions and ideas.

## III. HOW DO PEOPLE LIVE IN THE DESERT?

of the American Southwest.

**Hunter/gatherers.** This group ate whatever food they could kill (hunt) or find (gather). Usually, the men did the hunting and the women did the gathering. They lived in small family groups that worked together to get food.

The groups moved from place to place looking for food. Wherever they camped, they put up a home of grass and sticks. When they moved on, they left the home behind. They would build new ones at the next camp.

Hunter/gatherers had to carry all of their things themselves. They had no animals to help, so they owned very little. They wore little or no clothing. A man might have his weapons and a few **ornaments**. A woman might have a digging stick, her ornaments, and a few hollow **gourds** to hold food or

water.

Hunter/gatherers had to know their desert very well. They had to know where to find water, what plants could be eaten, where to find animals to hunt, and how to use everything they could find to help them live.

These people were very clever about using the things they found. The Bushmen in the Kalahari made water jugs out of hollow ostrich eggs and hunted with poison-tipped arrows. The Aborigines of Australia could find water in their desert far from the water holes. They knew how to find frogs that filled themselves up with water and hid in the ground. They would dig up the frogs and get water from them. These people used the minds God gave them to live in very difficult places.



**Put the correct answer in the blank.**

- 3.1 Hunter/gatherers owned \_\_\_\_\_.
- 3.2 The \_\_\_\_\_ usually did the hunting and the \_\_\_\_\_ did the gathering.
- 3.3 The three traditional ways of life in a desert were:  
a. \_\_\_\_\_, b. \_\_\_\_\_,  
and c. \_\_\_\_\_.
- 3.4 Hunter/gatherers built a new \_\_\_\_\_ every place they camped.
- 3.5 Hunter/gathers had to know their \_\_\_\_\_ very well to live there.

The nomads of the Sahara and Arabian Deserts lived very much the same way. They lived in tents and raised livestock. They would travel from place to place to find food for their animals. They usually kept sheep, goats, cattle, camels, and perhaps horses. When the animals had eaten all the **sparse** grass in one place, the group packed up and moved to another.

**Berber and Bedouin Nomads.** The nomads of the Sahara and Arabian Deserts lived very much the same way. They lived in tents and raised livestock. They would travel from place to place to find food for their animals. They usually kept sheep, goats, cattle, camels, and perhaps horses. When the animals had eaten all the **sparse** grass in one place, the group packed up and moved to another.

Unlike hunter/gatherers, nomads had many possessions. They wore long, loose clothes which protected them from the sun. They lived in large tents. The desert under the tents was usually covered with rugs. Their horses and camels wore saddles that were often beautifully decorated. The men had metal weapons that were decorated. The women often owned lovely jewelry, metal cooking pots, and dishes. The nomads had camels to carry all of their things when they moved to a new place.

The nomads were able to trade meat, milk, and animal skins for fruit, vegetables, jewelry, pans, weapons, and other goods. They traded with the people who lived in villages on the larger oases and with the traveling merchants who visited there.

The nomads also traded across the desert. Salt was very important and hard to find south of the Sahara Desert. However, there were huge

the desert in large **caravans** of camels. They often went to the city of Timbuktu, south of the Sahara, to trade their salt. The trade brought the nomads gold they could use to buy many beautiful things. In Arabia the nomads traded valuable resins called frankincense and myrrh which had to be taken across the desert.

The Berbers and Bedouins would fight fierce battles with each other over trade, use of oases, and insults made against their families. In one tribe, the Tuareg of the Sahara, the men wrapped long blue clothes around their heads so that only their eyes showed. This made them look very fierce in battle. They would charge into battle on camels waving swords and spears.

**Bedouin tribesmen.**



These nomads all thought it was very important to be kind to visitors. They always offered food and drink. It was an insult to say no. These nomad people all became **Moslems** about 600 years after the birth of Jesus. At that time, large Moslem armies conquered the Arabian Peninsula and North Africa.

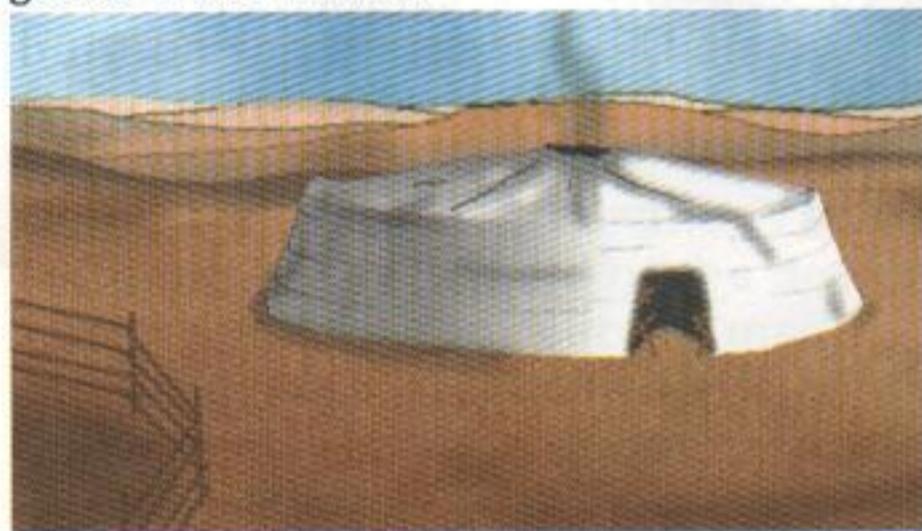
**Mongol Nomads.** The nomads of the Gobi Desert also raised livestock to survive. The *steppes* grew enough grass to support large herds of goats, camels, yaks, sheep, cattle, and, most importantly, horses. The Mongol horses were small, tough animals, and the people were excellent riders.

The hard, flat steppes were great places to ride horses. The Mongols used horses to move their herds, just like cowboys. They used a rope on a long pole to catch any animal that tried to run away. They even learned to shoot a bow and arrow from the back of a running horse.

The Mongols did not trade like the Berbers and Bedouins. They had no nearby towns and villages to go to for trade. They got everything they

needed from their animals. They ate mostly meat and milk. The milk was made into cheese, butter, yogurt, and a bubbly milk drink called *airag*. They made their clothes from the wool and skins of their animals. But, the most amazing thing they made was their homes.

A Mongols' home was a type of tent called a *ger* or *yurt*. It was built in a circle over a wood frame. The frame was built so it could be easily folded up. The frame was covered with felt. Felt is a cloth made by packing wool together very hard. It is very thick and warm. These *gers* were good protection against the cold night weather of the Gobi Desert. Thus, nomad people were able to live in the deserts and have good lives there.



A yurt.



**Put the correct answer in the blank.**

- 3.6 Nomads, unlike hunter/gatherers had many \_\_\_\_\_.
- 3.7 The nomads of the Sahara were able to trade \_\_\_\_\_ across the desert using their camels.
- 3.8 Mongols got everything they need to live from their \_\_\_\_\_.
- 3.9 The Mongols' most important animals were their \_\_\_\_\_.



Teacher check

Initial \_\_\_\_\_

Date \_\_\_\_\_

camp.

3.19 Write a story about what it would be like for you to visit a nomad

**Do this activity.**



- |      |       |                |                                 |
|------|-------|----------------|---------------------------------|
| 3.18 | _____ | felt           | f. person who believes in Islam |
| 3.17 | _____ | ger            | e. a group of traders traveling |
| 3.16 | _____ | made from milk | d. cheese, butter, yogurt       |
| 3.15 | _____ | caravan        | c. packed-down wool cloth       |
| 3.14 | _____ | steppes        | b. dry, flat plains             |
| 3.13 | _____ | Moslem         | a. Mongol's home                |

**Match these items.**



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.12 What did Berbers and Bedouins fight each other over?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.11 Why did nomads move from place to place?

**Answer the questions.**

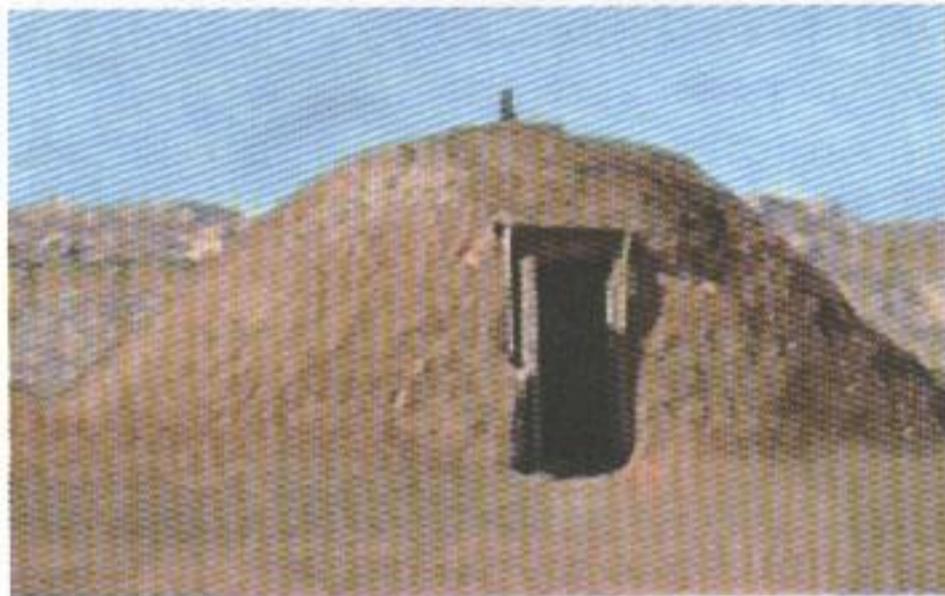


things they could not get from their animals.

3.10 Berbers and Bedouins traded \_\_\_\_\_, and \_\_\_\_\_ for \_\_\_\_\_.

**Villagers.** The village-building people of the American deserts grew **crops** along rivers and other sources of water. They grew food like corn, squash, and beans that did well in the dry **climate** and also gathered food from the desert plants. They kept small herds of sheep and hunted wild animals for food too. They used every source of food they could find. They had to do this because they did not use up all the food in one place and then move. They needed to always have enough food right near their village.

The Hopi people built their villages in an unusual place. They were built high on top of tall, straight-sided, flat-topped mountains called *mesas*. They did this to protect the village from attack. It



**Navajo hogan**

would be difficult to attack the village if the enemies had to climb hundreds of feet up a cliff! The only problem was the Hopis had to climb down from the *mesa* each day to get water, take care of the crops, and tend the animals.

Hopi villages, called Pueblos, were built like big apartment



**A Hopi Kachina**

houses, one on top of the other. They were made of adobe (ə dō'bē), bricks made of sun-dried mud. The thick walls kept them cool during the day and warm at night.

Navajo (nav' ə hō) villages were built on the flat desert. Their homes were made of logs covered with dirt. They were called *hogans*. Again, the thick walls protected the people from the heat and cold of the desert.

Navajo and Hopi people made all the things they needed to live. They shaped clay into pots or jars and baked it to make pottery. They wove baskets from the leaves of desert plants. They wove clothes and blankets from the wool of their sheep. They also learned how to make their things very beautiful by weaving designs and painting the pottery. Today some of these people still do the traditional crafts. The baskets, pottery, and blankets are expensive to buy because they take so long to make and are so beautiful.



**Write true or false on the blank.**

- 3.20 Hopi people built their homes on the desert floor. \_\_\_\_\_
- 3.21 A *hogan* is a Navajo home. \_\_\_\_\_
- 3.22 Village people grew crops and raised animals. \_\_\_\_\_
- 3.23 Village people used all the food in one spot and then moved someplace else. \_\_\_\_\_
- 3.24 A pueblo is a Hopi village. \_\_\_\_\_
- 3.25 Hopi and Navajo people made beautiful blankets, baskets, and pottery. \_\_\_\_\_

**Modern Ways of Life**

Modern machines and knowledge have made the desert a more comfortable place to live. People have found good ways to bring large amounts of water into the desert. Farmers have learned how to make the best use of the water to grow food in the desert.

There are big cities in the desert today. The water allows many people to live there. Other inventions, like air conditioning, make life comfortable in the desert. People have learned to be creative in finding ways to live in the desert today.

One way to bring water to the desert is to build **canals**. These long ditches and/or pipes bring water from a large lake or river across the desert. With today's modern equipment, the water can come from a long way away. The Central Arizona Project, for

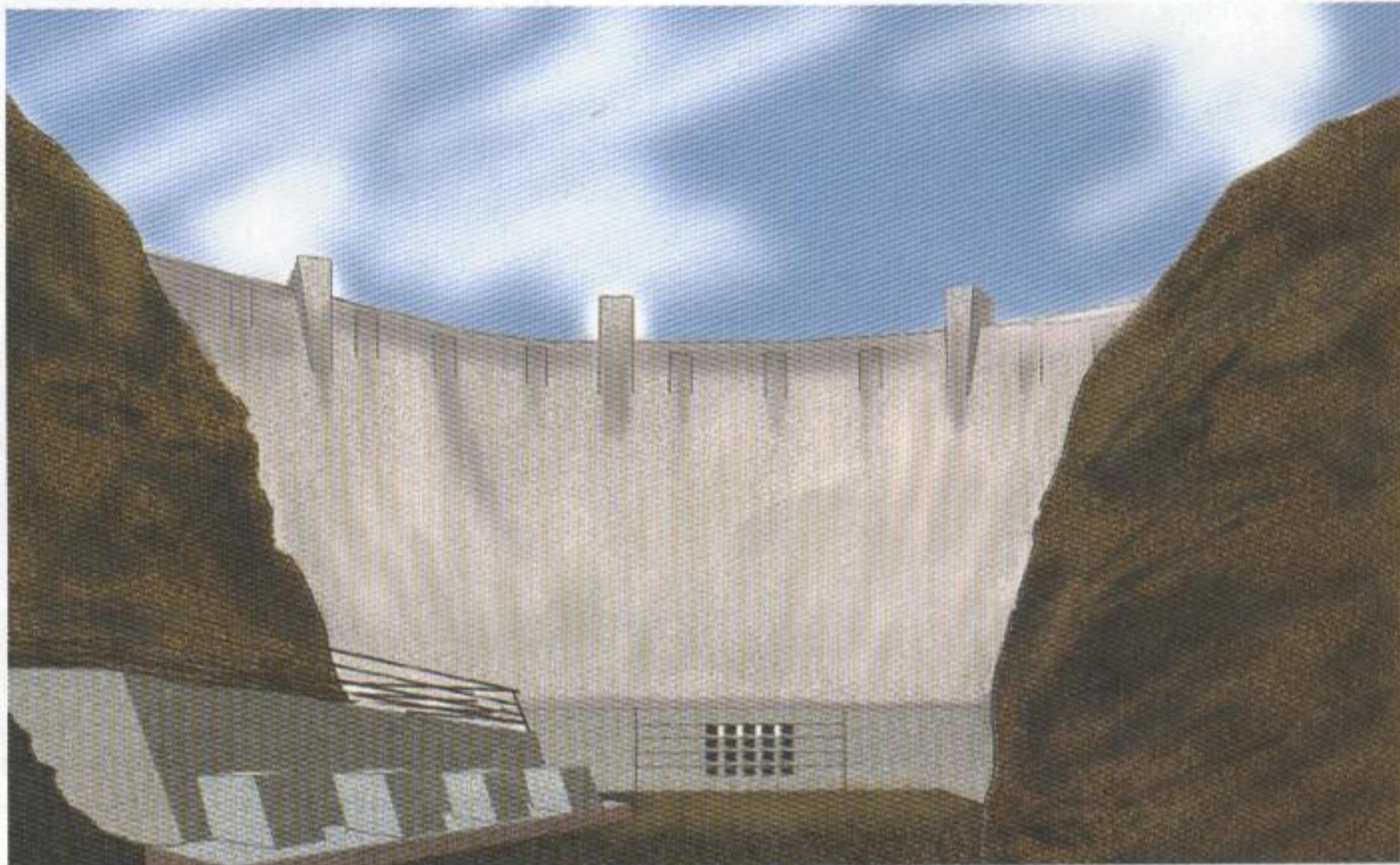
example, is a 336-mile long system of pipes and canals that brings water to Phoenix, Arizona in the Sonoran Desert. Another way to bring in water is to put up a dam across the rivers that come into the desert. The lake behind the dam becomes a big water tank. The short, heavy desert rainfall can be kept until it is needed in drier times. Another way is to use modern equipment to dig deep wells. These wells can reach water far underground, then an electric pump can bring the water up for people to use.

Farmers can grow food in the desert by using **irrigation**. The water is pumped into long, shallow trenches beside the growing plants, so their roots can reach it. However, the water evaporates and leave salt behind that will kill the crops, so the

farmer has to use a large amount of water to wash away the salt. He also has to use fertilizer to make the barren desert soil right for growing crops.

Some farms use very special ways to grow food in the desert. One way is called *hydroponics*. In hydroponics, the farmer grows the

crops inside a large building without using any dirt. The plants are hung from string, with their roots in a nutrient liquid that makes them grow. Very little water is lost to evaporation because the plants are inside, protected from the desert sun and dry air.



Dams hold water for deserts.



**Answer these questions.**

3.26 List three ways to bring water to a desert.

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

3.27 Farmers can grow food in the desert using \_\_\_\_\_ to water the plants.

Other modern inventions make life more comfortable in the desert. Air conditioning allows people inside to be cool and comfortable even when it is 115°F outside. Modern roads and cars allow people to travel quickly and easily across the desert. They also allow food to be brought in from non-desert areas that they shade the window from the heat. Window screens are made so built with walls that keep out the heat. Houses are for life in the desert. Houses are built with walls that keep out the heat. Window screens are made so that they shade the window from the heat.

When a city is built in the desert, the people must build their homes for life in the desert. Houses are built with walls that keep out the heat. Window screens are made so that they shade the window from the heat.

When a city is built in the desert, the people must build their homes for life in the desert. Houses are built with walls that keep out the heat. Window screens are made so that they shade the window from the heat.

A desert landscape.



3.28 A special kind of indoor farming that uses no dirt is called

3.29 The Central Arizona Project brings water to

sun. Houses are painted light colors that reflect the sunlight away from the house. Yards are filled with desert plants and watered by small pipes that drip right on the roots. Cars use reflective film on some of their windows to block out the sun.

The desert has one very important source of electric power—sunlight. Solar panels create electricity from sunlight. It takes quite a bit of sunlight for them to work, and they do not make a great deal of electricity. They work very well in the desert, though, to supply power for things that require not too much electricity, such as telephones, lights, and hot water.

Some people have done very creative things to live in the desert. In Australia, many people make their living by raising sheep on desert grasslands. It takes a large piece of land to raise the sheep, so the people live far apart. The children go to school by radio! If someone needs a doctor, he comes by airplane. On the Arabian Peninsula,

fresh water is made by using huge factories that take the salt out of the nearby ocean water.

One very clever idea allows people who live along the coast in the Atacama Desert to "harvest the clouds," the fog that comes in but never drops rain. They put up plastic sheets or nets on the mountains above their homes, with pans underneath them. The plastic catches the moisture in the fog and forms drops of water. The water drops fall into the pans, which drain into pipes. The pipes carry the water down to the people below. It is all very simple and costs very little to build.

If you ever visit the town of Coober Pedy, Australia, you might have trouble finding it. Most of the town is underground! The houses, stores, restaurants, and even hotels are built that way to stay cool in the hot desert. This is another clever way people live in the desert.

Even today people who live in deserts must be careful. Deserts are



**A solar panel on a house.**

hard places for people. When they go outside, people must use sunscreen to prevent sunburn. They wear sunglasses and hats to protect their eyes and face from the sun. They have to drink extra water in the dry, hot air. If they work outside, they must be careful not to do too much or they will get sick. Hiking out into the desert without enough water is dangerous. A few people die every year in the American deserts making that mistake.

Deserts are hard places for plants, animals, and people to live. The plants and animals were specially created by God to live in such a dry, hot place. God gave men brains, so they could find ways to live in the desert themselves. Men used the minds God gave them to live in the desert long ago. Modern people have learned how to live in the desert comfortably, using new machines and clever ideas, but desert life will always be hard on plants, animals, and people.

**Answer these questions.**



3.30

Why do these inventions make life in the desert easier?

a. air conditioning

b. roads and cars

3.31

What is the one important source of electric power in the desert?

3.32

How do the people in the Atacama Desert "harvest the clouds?"

**Circle the correct word.**



3.33

Cooper Pedy, Australia is (underwater / underground / on a cliff).

3.34

Solar panels create electricity from (water / air / sunlight).

3.35

Deserts are (hard / easy / impossible) places for plants, animals, and people to live.



## SELF TEST 3

Match these items by writing the correct letter on the line (2 points each answer).

3.01	_____	kangaroo rat
3.02	_____	hydroponics
3.03	_____	camel
3.04	_____	<i>ger</i>
3.05	_____	aquifer
3.06	_____	dune
3.07	_____	irrigation
3.08	_____	date palm
3.09	_____	hunter/gatherers
3.010	_____	nomads
3.011	_____	villagers
3.012	_____	felt
3.013	_____	salt
3.014	_____	solar panels
3.015	_____	caravan
3.016	_____	pottery, baskets

- j. traditional Hopi and Navajo crafts
- k. large area of underground water
- l. supplying land with water
- m. traditional desert people who raise livestock and move to find food
- n. desert plant that produces fruit, leaves for mats, wood for fuel
- o. traditional desert people who eat what they can kill or find
- p. animal, eats seeds and plants, needs no water
- a. a Mongol nomad's home
- b. pile of sand blown by the wind
- c. traditional desert people who plant crops and do not move
- d. raising crop indoors without dirt in a special liquid
- e. pressed-down wool cloth
- f. item traded by Sahara nomads
- g. "ship of the desert"
- h. makes electricity from sunlight
- i. a group of traveling traders

**Name the continent where each desert is found.** Some answers will be used twice (3 points each answer).

- 3.017 Sahara \_\_\_\_\_
- 3.018 Atacama \_\_\_\_\_
- 3.019 American Southwest \_\_\_\_\_
- 3.020 Kalahari \_\_\_\_\_
- 3.021 Arabian \_\_\_\_\_
- 3.022 Gobi \_\_\_\_\_
- 3.023 Australian \_\_\_\_\_

**Choose the correct word to complete each sentence** (3 points each answer).

Capricorn  
Mongol

Cancer  
pueblos

Berber  
hemisphere

- 3.024 The line of dry area north of the equator is the Tropic of \_\_\_\_\_.
- 3.025 The line of dry area south of the equator is the Tropic of \_\_\_\_\_.
- 3.026 The nomads of the Gobi Desert who raised horses on the *steppes* were called \_\_\_\_\_.
- 3.027 The nomads of the Sahara Desert who became Moslems were the \_\_\_\_\_.
- 3.028 One half of the earth is called a \_\_\_\_\_.
- 3.029 Hopi villages, built on top of *mesas*, were called \_\_\_\_\_.



Possible Score 100

My Score \_\_\_\_\_

Teacher check \_\_\_\_\_

Initial \_\_\_\_\_

Date \_\_\_\_\_

- 3.041 \_\_\_\_\_ The Nile River is in the Sahara Desert.
- 3.040 \_\_\_\_\_ There are no deserts in Europe.
- 3.039 \_\_\_\_\_ It is safe to hike in the desert without extra water.
- 3.038 \_\_\_\_\_ Desert plants can only live near a lake or river.
- 3.037 \_\_\_\_\_ Cactus have insides like a sponge to fill with water after it rains.
- 3.036 \_\_\_\_\_ Desert animals usually hunt for food at night when it is cooler.
- 3.035 \_\_\_\_\_ Digging wells is one way to bring water into a desert.
- 3.034 \_\_\_\_\_ Nomads do not own many things.
- 3.033 \_\_\_\_\_ hunter/gatherers do not own many things.

**Write true or false on the blank (1 point each answer).**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.032 Why are lakes in a desert often salty?

a. \_\_\_\_\_

b. \_\_\_\_\_

desert?

3.031 What are the two ways moisture can be blocked from reaching a

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3.030 How do the people of the Atacama Desert "harvest the clouds"?

**Answer the following questions (5 points each answer).**

# HISTORY AND GEOGRAPHY 403: LIFEPAK TEST

Write true or false (1 point each answer).

1. \_\_\_\_\_ Children of the Australian Desert go to school by radio.
2. \_\_\_\_\_ The cactus stores water in its trunk like a sponge.
3. \_\_\_\_\_ Deserts are all empty piles of sand.
4. \_\_\_\_\_ A desert receives 30 or more inches of rain in a year.
5. \_\_\_\_\_ A desert is often very hot in the day and cold at night.
6. \_\_\_\_\_ Desert plants die when it rains.
7. \_\_\_\_\_ The kangaroo rat must live near water so it can get a long drink every day.
8. \_\_\_\_\_ It has always been easy for people to live in the desert.
9. \_\_\_\_\_ Hopi and Navajo people made beautiful blankets, baskets, and pottery.
10. \_\_\_\_\_ Desert lakes are often salty because the water evaporates and leaves salt behind.
11. \_\_\_\_\_ Places on earth are colder as you get nearer the equator.

Complete these sentences (3 points each answer).

12. The line of dry area south of the equator is along the \_\_\_\_\_.
13. The line of dry area north of the equator is along the \_\_\_\_\_.
14. Some nomads earned gold by taking \_\_\_\_\_ from the mines to Timbuktu across the Sahara.
15. The most important animal to the Mongol nomads was the \_\_\_\_\_.
16. The half of the earth north of the equator is called the \_\_\_\_\_.

17. Name one modern way to bring water into the desert:  
\_\_\_\_\_.
18. The largest desert in the world is the \_\_\_\_\_ Desert.
19. The Arabian Desert is rich in \_\_\_\_\_.
20. The half of the earth south of the equator is called the  
\_\_\_\_\_.
21. Traditional desert people who eat what they can kill or find are called \_\_\_\_\_.
22. Most desert animals hunt for food (when?) \_\_\_\_\_.

**Match these items** (2 points each answer).

- |     |                    |  |
|-----|--------------------|--|
| 23. | _____ nomad        | a. pressed-down wool cloth   |
| 24. | _____ camel        | b. large area of underground water                                   |
| 25. | _____ livestock    | c. "ship of the desert"  |
| 26. | _____ date palm    | d. make electricity from sunlight                                    |
| 27. | _____ hydroponics  | e. traditional people who move to find food for their animals        |
| 28. | _____ villagers    | f. farm animals  |
| 29. | _____ aquifer      | g. a green place in the desert where there is water                  |
| 30. | _____ solar panels | h. desert plant that has fruit, leaves for mats, and bark for ropes  |
| 31. | _____ felt         | i. Hopi village  |
| 32. | _____ oasis        | j. raising crops without dirt, in a special liquid                   |
| 33. | _____ pueblo       | k. traditional desert people who grow crops around water             |
| 34. | _____ mesquite     | l. desert plant with waxy leaves and deep roots and edible bean pods |

**Name the continent where each desert is located (3 points each answer).**

35. American Southwest \_\_\_\_\_

36. Atacama \_\_\_\_\_

37. Sahara \_\_\_\_\_

38. Kalahari \_\_\_\_\_

39. Arabian \_\_\_\_\_

40. Gobi \_\_\_\_\_

41. Australian \_\_\_\_\_

42. no deserts at all \_\_\_\_\_

**Answer this question (4 points this answer).**

43. How do the people of the Atacama Desert "harvest the clouds"?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

44. List two ways moisture can be blocked from reaching a desert. (2 points each way).

a. \_\_\_\_\_

b. \_\_\_\_\_

# HISTORY & GEOGRAPHY

4 0 3

## LIFEPAC TEST

Name \_\_\_\_\_

Date \_\_\_\_\_

Score \_\_\_\_\_

Possible Score \_\_\_\_\_ 100