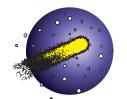
### **Contents**

	Introduc Student				iii iv
		Unit	1	"In the beginning God created the heaven and the earth."	
•	Chapter	1	God	Gives Us Light	4
	Chapter	2	God	Gives Us Night	7
	Chapter	3	God	Gives Us the Firmament	10
	Chapter	4	God	Gives Us Clouds	14
	Chapter	5	God	Gives Us Water	17
	Chapter	6	God	Gives Us the Earth	22
	Chapter	7	God	Gives Us the Planets	28
	Chapter	8	God	Gives Us Rocks and Mountains	34
	Chapter	9	God	Gives Us Oceans and Seas	39
	Chapter	10	God	Gives Us Lakes and Rivers	45
		Unit	2	"And God said, Let the earth bring forth grass."	
	Chapter	11	God	Gives Us Grass	52
	Chapter	12	God	Gives Us Cacti	58
	Chapter	13	God	Gives Us Ferns and Mosses	63
	Chapter	14	God	Gives Us Flowers	66
	Chapter	15	God	Gives Us Vegetables and Herbs	73
	Chapter	16	God	Gives Us Seeds	78
	Chapter	17	God	Gives Us Leaves	82
	Chapter	18	God	Gives Us Trees	88



## Unit 3 "And God said, Let there be lights in the firmament..."

Chapter 19	God Gives Us the Sun
Chapter 20	God Gives Us the Moon
Chapter 21	God Gives Us the Stars
Chapter 22	God Gives Us Constellations, Comets, and Meteors . 113
Chapter 23	God Gives Us Spring and Rain
Chapter 24	God Gives Us Summer and Thunderstorms 127
Chapter 25	God Gives Us Autumn and Wind
Chapter 26	God Gives Us Winter and Snow



# Unit 4 "And God created ... every living creature . . ."

Chapter 27	God Gives Us Fish
Chapter 28	God Gives Us Three Unusual Sea Animals 149
Chapter 29	God Gives Us Amphibians
Chapter 30	God Gives Us Reptiles
Chapter 31	God Gives Us Fearless Reptile 163
Chapter 32	God Gives Us Birds
Chapter 33	God Gives Us Swift Bird
Chapter 34	God Gives Us Long-Legged Bird
Chapter 35	God Gives Us Mammals
Chapter 36	God Gives Us Swimming Mammal 187
Chapter 37	God Gives Us Flying Mammal 191
Chapter 38	God Gives Us Cute Mammal 194
Chapter 39	God Gives Us Mighty Mammal
Chapter 40	God Gives Us Insects
Chapter 41	God Gives Us Flying Insect
Chapter 42	God Gives Us Crawling Insect 209
Chapter 43	God Gives Us Working Insect
Chapter 44	God Gives Us Shining Insect



### Unit 5 "And God said, Let us make man..."

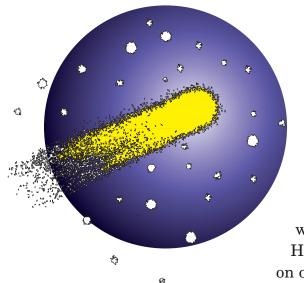
	Chapter 45	God Gives You Your Body
	Chapter 46	God Gives You Your Liquid of Life
	Chapter 47	God Gives You Your Pump
	Chapter 48	God Gives You Your Control Center
	Chapter 49	God Gives You Your Telegraphing System 241
	Chapter 50	God Gives You Your Camera
	Chapter 51	God Gives You Your Telephone $\hdots$
	Chapter 52	God Gives You Your Breather
	Chapter 53	God Gives You Your Grinder and Noisemaker $\ldots257$
	Chapter 54	God Gives You Your Skeleton
	Chapter 55	God Gives You Your Go Power
	Chapter 56	God Gives You Your Cover $\hdots$
	Chapter 57	God Gives You Your Food Pipeline
	Chapter 58	God Gives You Your Storage Tank 277
	Chapter 59	God Gives You Your Digestive Tube $\ \ldots \ 280$
	Chapter 60	God Gives You Your Organ With Many Jobs 284
	Chapter 61	God Gives You Your Filter System
	Chapter 62	God Gives You Your Air Supplier
G	$tlossary \dots$	
S	cripture Index	

### GOD GIVES US ...

### Summer and Thunderstorms

Chapter

24



Summer is the season of long, hot days and short, warm nights. In the Northern Hemisphere, summer begins on or about June 21 when the sun shines most directly on it.

In the Southern Hemisphere it is winter.

In springtime seeds and blossoms begin. In summertime they grow and develop. The long, warm days change small seeds into vegetables and flowers. The apple blossoms become tiny green fruit and then big, juicy apples.

Sometimes thunderstorms come during
summer's hot days.
Does the loud *BANG!*of the thunder make
you jump? Thunder is
only the noise of air.
A lightning flash heats
the air around
it and makes the air
molecules fly in all



Summer is the season of thunderstorms, with their loud claps of thunder and brilliant streaks of lightning.



directions. As they expand, they crash into cooler air molecules and start an air wave that makes the sound we call thunder. Thunder cannot hurt you, but lightning can.

Lightning is **electricity** that makes a huge spark or flash in the sky. In 1752, Benjamin Franklin proved that lightning was electricity by flying a kite during an electrical storm. He had a key tied to his kite string. When Benjamin Franklin touched this key he got a shock. His experiment was very dangerous but also very important. It helped scientists to understand electricity and to put it to use for us.

Usually lightning passes from one cloud to another and does no harm. When lightning passes from a cloud to the earth, it often causes damage. Lightning has started many fires and killed many animals and people. When you are in a thunderstorm, remember these rules:

- 1. Don't stand under a tree or near the water.
- 2. Don't stand in front of windows or doorways.
- 3. Don't take a bath or wash dishes.
- 4. Don't touch anything run by electricity such as tape players, toasters, or telephones.

Lightning helps us in an important way. It changes nitrogen (nī' trə jən) in the air into a form plants can use to grow. The rain carries this changed nitrogen into the soil for the plants. Although lightning can be dangerous, God made lightning for our good. We should thank Him for it.

#### **Learn More About Thunderstorms**

Imagine you are picking up rocks in a plowed field on a hot day. If you look out across the field, you may see the heat making shimmering waves in the air. The bare, flat land is gathering up heat.

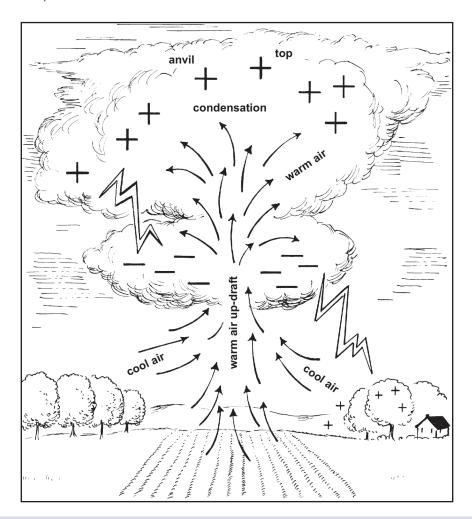
From the woods on your left you feel a cool breeze blowing across your legs. There is cool air in the woodland because it doesn't warm up as fast as the flat, bare land. Can you explain why?

As the cool air blows in from the side, the warm air rises in a tall column. When the rising warm air cools to the **dew point**,



clouds will begin to form. Dew point is the temperature at which water vapor begins to condense.

Standing in the field, you cannot see the warm air column rising, but you can see the dark cloud that forms as the air cools. This same cold-air-pushing-warm-air battle is taking place in fields beyond you. Soon the sky is filled with dark cumulonimbus clouds, called *thunderheads*.



The electrical charges in clouds during a thunderstorm form as raindrops and ice crystals rub over each other. Lightning passes between negatively and positively charged parts of the cloud. Lightning also passes from negative charges in the cloud to positive charges on objects on the ground.

The lightning heats the air and causes it to expand. This makes the sound we call thunder. The sound waves may echo among the clouds, causing the low, rumbling sound of thunder.

A thunderhead can hold as many as 6 trillion raindrops. These raindrops are being pushed up and down by warm updrafts and cool downdrafts. As large raindrops are broken, an electrical charge is created. Large raindrops near the top of the cloud have a positive charge, and small raindrops in the lower part of the cloud have a negative charge. When the negative charge is greater than the positive charge, the charges will equalize. This makes a flash of lightning. When the ground also becomes charged, you will see lightning flash from the cloud to the ground. But long before this happens you should be safe inside the house.

Almost every place in the world has thunderstorms. Right now about two thousand thunderstorms are occurring around the world. God makes the thunderstorms, so don't fear them, but do respect them. "He maketh lightnings with rain" (Jeremiah 10:13).



### For You to Do \* \* \* \* \* \* \* \*

- 1. What happens to seeds and blossoms during the summer?
- 2. When does summer begin?
- 3. Is thunder dangerous?
- 4. What causes thunder?
- 5. Is lightning dangerous?
- 6. What is lightning?
- 7. Name four things you should not do during a thunderstorm.
- 8. Name an important way lightning helps us.
- 9. Read Matthew 24:27. What is going to be like the lightning?



Would you like to learn to tell how far a thunderstorm is from you? Since light travels much faster than sound, you see a flash of lightning just when it happens. Then you hear the thunder sometime



after you see the lightning. You can figure how far away the lightning is by counting the seconds between the flash and the thunder. Count slowly, 1-2-3-4-5-. The lightning is about one mile (1½ km) away for each five seconds you count. If there is not time to count to 5, the lightning is near you. It doesn't matter how close the lightning comes as long as you know God is with you and that He will take care of you. Learn to say, "What time I am afraid, I will trust in thee" (Psalm 56:3).



You can make lightning. When electricity passes through the air, it makes a spark. You can make electricity pass through the air by doing this experiment. (For best results, the air should be dry, not damp.) In



a dark room stand in front of a mirror and comb your hair briskly. Do you see and hear sparks? The sparks are very small, but they are just like real lightning.

### GOD GIVES US . . .

AUTUMN AND WIND

### Chapter

25

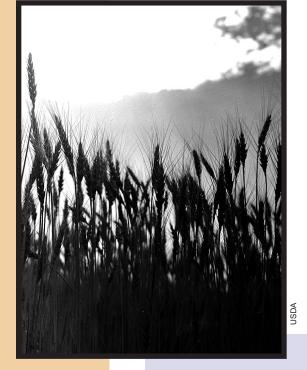
Autumn is the time for falling leaves. For this reason autumn is sometimes called *fall*. It begins on or about September 23, the time when the lengths of day and night are equal. In the southern half of

the world, spring begins at this time.

43

The shorter days and cooler weather cause new life and new growth to stop. Slowly the sap goes down in the trees and the leaves turn beautiful colors as they die. Soon brightly-colored leaves are falling everywhere.

The autumn season is also called "harvesttime." Can you think of some reasons why? Most garden vegetables and fruits have finished growing. Now is the time to harvest them to take them in before the cold winter spoils them.



Autumn is the harvest season.

Wheat turns golden-brown and the harvest their corn. We bring in the



Autumn is also canning and preserving time. Some mothers work hard to can fruits and vegetables. How good they taste during the winter!

Dale D. Gehman

Squirrels gather nuts and ants gather food for the winter. People also harvest food for the winter. Perhaps your mother has been canning, freezing, and drying food for your family to eat during the cold winter days.

Autumn is a very special time to be thankful for all the wonderful gifts God has given to you.

Thanksgiving Day comes

during this season, but don't be thankful on this special day only. Every day is a day to give thanks to God.

Autumn is also the time for spreading many seeds that will grow into new plants next year. The wind does a good job of scattering flower, grass, and tree seeds to new homes all around. God uses the wind to make a beautiful green and flowered world. But scattering seeds is not all that the wind does. How many more things can you name?

### Mr. Windy

Today he came to town, Windy Wind's at his work.

He bellows,

He blows,

Not a care he knows.

He moves anything he pleases with a rude jerk.

He picks up the leaves, arranges them in a pile;

He huffs,

He puffs,

'Til he's wind enough

To pick them all up again and scatter a mile.

He picks up the neighbor's trash, blows it in my yard.



He whistles,
He sings,
Happily he brings,
Papers, cans, twigs—anything he wants to discard.
He arranges and rearranges all he moves.
He rattles,
He shakes,
Sometimes even breaks.
Through swaying and bending trees his power he proves.

The power of the wind is from God. Read Nahum 1:3. Not everything the wind does is bad. You already learned about the important job of carrying seeds. Years ago, the wind was one of man's main sources of power. Windmills used the wind's power to pump water and to supply power to run machinery. In many countries the wind is still used in these ways.

The wind also helps the farmer by drying his fields with warm breezes. Sometimes the wind blowing through orchards and vine-yards protects the fruit from frost. God made the wind for many good reasons. Enjoy the windy autumn days and thank God for the harvest time.

#### **Learn More About Wind**

The wind goeth toward the south,
And turneth about unto the north;
It whirleth about continually,
And the wind returneth again according to his circuits.

Wind is simply air moving across the earth's surface. Sometimes the air whispers as a gentle breeze, sometimes it blows as a gale, and sometimes it roars as a hurricane.

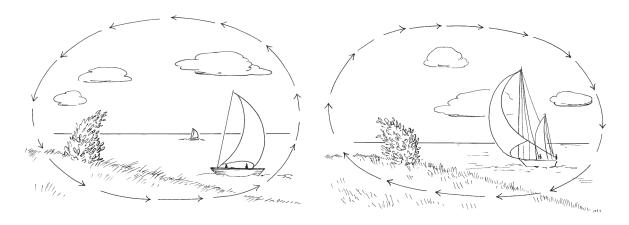
But what causes the wind to blow? When air is warmed, it expands, grows lighter, and has less pressure. When air is cooled, it contracts, grows heavier, and exerts more pressure. Wind is caused by air masses of different temperatures and pressures pushing against each other.

Standing on the shores of a lake on a summer day you can almost always feel a breeze. Why? The day is warm, the land



#### LAND BREEZE

#### SEA BREEZE



behind you is warm, and the air is warm. But the air over the water is cooler because it contains moisture from the lake. The cool air moves in over the land, causing the lighter warm air to rise. This creates a wind.

If you would stand on the same shore in the evening, you would again feel a breeze. But this time the breeze would be coming from the land. The land has cooled faster than the water.

How pleasant is a cool breeze on a hot day and how fun to fly a kite on a windy day. God "bringeth forth the wind out of his treasures" (Jeremiah 10:13). What a nice gift!



## For You to Do \* \* \*

- 1. What is another name for autumn?
- 2. Why is autumn called by this other name?
- 3. When does autumn begin?
- 4. What is special about that day?
- 5. What is harvesttime?
- 6. Name three good things the wind does.
- 7. Read Mark 4:37-41 and answer these questions.
  - a. Why were the disciples afraid in the ship?



- b. Where was Jesus during the storm?
- c. What did Jesus say to the sea?
- d. What two things obeyed Jesus?



### **EXPERIMENT** \* \* \* \* \* \* \* \* \* \*

Buy some soap bubble solution, or make your own using liquid soap and water. Blow bubbles outdoors to see from which direction the wind is blowing and how hard it is blowing. Keep a record like this for a week. Always write down the direction *from* which the wind blows.



Use the first letter or a combination of letters to show from which direction the wind is blowing:

E = East wind

N = North wind

S = South wind

W = West wind

Use this table to show the speed of the wind. You should be able to tell this by whether your bubbles blow away or just float away.

F = fast

M = medium fast

VF = very fast

SL = slow

VS = very slow

	MORNI	NG	EVENING	
	Direction	Speed	Direction	Speed
Mon.	E	F	E	SL
Tues.	S.E.	М	S	VS
Wed.				
Thurs.				
Fri.				