

Do You Know?

A NEW WAY TO LEARN ONE WORTH WHILE THING EACH DAY

(Copyright, 1927, Frank Collier). A set of seven questions will appear herein each week, pertaining to: Common Things—How they work, Story of the stars, The earth, Life, Electricity, Radio, History, Geography, Economics, Law, health, Manners, Customs, Man, Animals, Birds, Plant Life, Miscellaneous.

8. What is a vacuum?
9. How to boil water without heating it?
10. How is condensed milk made?
11. What is a Barometer?
12. How does it foretell the weather?
13. What other uses has the Barometer?
14. How does the air hold up the heavy airplane?

CORRECT ANSWERS GIVEN NEXT WEEK

See how many you can answer by that time. THEY WILL EMBRACE THE FUNDAMENTALS OF A LIBERAL EDUCATION—Get a scrap book and keep for future reference. (We invite constructive suggestions or criticisms).

Answers to Last Weeks Questions

1. Ordinary air is about 20 parts oxygen gas, 80 parts nitrogen gas; also contains small amounts of other gases and more or less moisture. These gases are not chemically combined, but simply mixed together—as distinct as so many grains of wheat and corn mingled together in a measure. The oxygen is essential to combustion, also absolutely necessary to sustain life. The principal function of the other gas (nitrogen) seems to be to dilute the oxygen, which would otherwise be too strong.
2. As we rise in a balloon or airplane or climb a mountainside, the air constantly gets thinner. Half the air is within four miles of the earth. At 20 miles the air is 100 times thinner than at sea level. Small balloons containing only automatic recording instruments have reached 30 miles. We know by light streaks made by

the so-called "shooting stars" that the air reaches at least 40 or 50 miles. At 50 miles the air is so extremely thin that this is usually given as its height. It is not likely there is a uniform upper boundary to the air, but that it gradually gets thinner until it disappears entirely and nothing remains but empty space.

3. Practically all life is below the four-mile level. The highest point to which a bird can fly is five miles. The Condor, the mightiest bird a wing, has been seen soaring above the summit of the Andes at an altitude of five miles. Small birds and insects carried up by airplanes and balloons, drop over insensible at two or three miles. The greatest height climbed by a mountaineer is five miles, where breathing was found very difficult. Man has risen in an airplane to about seven and one-half miles. It is necessary to carry oxygen gas to avoid great physical suffering at these extreme heights.

4. Just inside the ear drum, a very thin elastic membrane stretched tightly across the ear opening, similar to a drum head. Sound waves in the air strike against the ear drum and cause it to vibrate back and forth very rapidly. Directly back of and touching the ear drum is a set of three small, loosely-connected bones, which pass the vibrations of the ear drum onward to a little bag, or sac, that is filled with a liquid substance and sets this liquid into motion. The ends of the nerves of hearing are embedded in this bag and spread out into the liquid, where they perceive the vibrations and carry the sense of sound, or hearing to the brain.

5. Variations in the rapidity of the air waves hitting the ear drum give the different sounds. The lowest sounds are caused by vibrations as slow as 20 per second. High shrill sounds have vibrations as high as 10,000 or more per second. Air vibrations between 20 and 10,000 per second cover the range of human hearing, or what is known as Audio Frequency. One cannot perceive any sound from air vibrations that are slower or more rapid than the Audio Frequency range.

6. Radio waves are vibrations in the ether; sound waves vibrations in the air. So far as known, the

strongest radio waves have no direct effect on the hearing. The usual frequencies, (vibrations), of radio waves are 500,000 to more than a million per second. Any frequency (rapidity of vibration) above the range of human hearing is called Radio Frequency. You will at once perceive that the function of the radio receiving set is to receive these rapid radio waves in the ether, to slow down the number of vibrations per second and to convert them into air waves, or sound, that are within the range, or frequency, of human hearing, or what is called Audio Frequency.

7. When delivering the ball the pitcher gives it a peculiar twist or spin. On the side of the ball in the direction in which it is spinning there is more air resistance than on the opposite side. This resistance increases until it becomes strong enough to force the ball to one side in a curved line. The ball simply follows the line of least resistance. Different curves are thrown by changing the direction of the spin and varying the velocity of the spin in proportion to the speed of the ball.

CHRIST FOR ALL—ALL FOR CHRIST

The Word of God
By word is a lamp unto my feet, and a light unto my path.—Psalm 119: 105

BIBLE THOUGHT AND PRAYER

If parents will have their children memorize a Bible selection each week, it will prove a priceless heritage to them in after years.

STAY WITH THE LORD:—The Lord is with you, while ye be with him; and if ye seek him, he will be found of you; but if ye forsake him, he will forsake you. II. Chronicles 15:2.

PRAYER:—O Lord, we would seek Thee now when Thou mayest be found, and call upon Thee whilst Thou art near, for this is the day of Thy salvation.

QUESTIONS AND BIBLE ANSWERS

If parents will have their children memorize the answers in the Bible Citations, it will prove a priceless heritage to them in after years. Why did Jesus say unto all, both young and old, Watch?

Portland ranks 16th American city in volume of building, for 11 months of 1926.

OREGON BANKERS, Y. M. C. A. SPONSORING THRIFT WEEK

National Thrift week, which has grown to be one of the outstanding events of the year throughout the United States, is being sponsored again in this state by the Oregon Bankers' association, the Y. M. C. A. and other organizations. Practically every city and town in Oregon will observe it. The whole movement is designed to improve the living conditions in every community and to inspire individuals and groups toward more careful methods of conduct, to the end that a happier and more prosperous America may result. The week always opens January 17, the birthday of Benjamin Franklin, the great thrift example of our times.

The 1927 daily schedule follows:
Monday, January 17, National Thrift day; Tuesday, National Budget or Home Economy day; Wednesday, National Life Insurance day; Thursday, National Own Your Home day; Friday, National Safe Investment day; Saturday, National Pay Bills Promptly day; Sunday, National Share With Others day.

Ten rules for a successful and happy life are proposed by the thrift committee:
1. Work and earn; 2. Make a budget; 3. Record expenditures; 4. Have a bank account; 5. Carry life insurance; 6. Own your home; 7. Make a will; 8. Invest in safe securities; 9. Pay bills promptly; 10. Share with others.

THRIFT WAS THE DIFFERENCE

By BEN HUR LAMPMAN
Editorial writer Morning Oregonian and author of "How Could I be Forgetting?"

I once knew a man, employed by a public service corporation, at a fixed scale of wages shared by thousands of others performing the same work, whose family was destitute. When a son died suddenly it was necessary for the corporation to advance funds for burial. This man, though in many respects an excellent fellow, fostered a benevolent delusion that he was much misused and had never had a fair chance.

I knew another man, engaged at the same employment, from which he derived not a penny more or less, whose family was in most comfortable circumstances. He and his wife have no apprehensions concerning the advancing years. They are not afraid of growing old. Thrift did it.

John W. Gates, in Hillsboro, raises best acre of fibre flax in Oregon.

Clatsop county has issued 310 commercial clam-diggers license this year.

For SALE or TRADE

I have a 40 acre ranch that I will sell, or trade for town property. Thirty acres under cultivation and 10 acres in timber. Good house and nicely fixed inside.

It is the former Mellinger ranch. If you know where it is call and see it. It is 1 1/2 miles from town on stony point road below city reservoir. If you don't know where it is, in-

quire at the Eagle office for Ratcliffe and I will be glad to show you where it is.

Oil test wells are to be bored in Harney valley, this year at Crane.

Broadcasting station opened here, to use University of Oregon talent at Eugene. Oregon's apple crop for 1926 estimated at 5,100,000 boxes, with 5,021 cars shipped.

FADA ATWATER KENT

Fenner Radio Shop

SETS - SERVICE - ACCESSORIES
Battery Charging

COME IN AND SEE US FOR

Fada Radios
Atwater Kent Radios
Radio Service
Savage Washers and Dryers.
New and Used Pianos.
Sheet Music.
WE GIVE EASY TERMS

GASCO BRICQUETS

For a steady hot fire at a price you can afford to burn them.

\$17.50 Per Ton

With Rebate of 10c Per Sack.

If its anything in the FEED LINE---WE HAVE IT.

Vernonia Trading Co.

CLEARANCE SALE

SALE STARTS
January 14th

SALE STOPS
January 22.

It is necessary to clear our shelves of a large assortment to make room for new merchandise coming in. We are therefore offering you the following high grade goods at astoundingly low prices. There are no "leaders," unless they could all be called leaders, for, without exception, we have marked down the prices on all those listed below and many other articles for which there was not room. Remember the date and take advantage of this opportunity.

BULK RICE— 100 pounds	\$8.95	Strictly Fresh Ranch Eggs, per dozen	38c	BORDEN's and OREGON Milk, per can	10c	Oregon Woolen Mills Goods Men's 3-Season UNIONSUITS	at, each	\$1.49
NAVY BEANS— 10 pounds	98c	Hard Wheat Flour— 49-lb. sack	\$1.89	BULK COFFEE— per pound	49c	Large assortment of different brands to be sold at, each	95c	
Sunny Monday Laundry Soap, 6 bars	25c	CORN MEAL— 9-pound sack	49c	PRUNES, 3 pounds for	25c	A big bargain on Men's ALL WOOL SUITS, latest style, fully guaranteed to be satisfactory in every way. Priced from \$17.50 to \$30.00 each		
Monopole Yellow Bantam Corn, 5 cans for	98c	POTATOES — per sack	\$1.75	GINGHAMS One of the largest assortments in town, at per yard	19c	Bergerman & Forester Logger Shoes at per pair	\$12.95	
Monopole Dimple Peas 5 cans	98c	BOCANCO PEAS— per can	15c	CRETONNE The largest assortment at, per yard	22 1/2c	HONOR-BUILT SHOES— Regular \$8.50 values on sale at, per pr.	\$4.49	
Monopole Slice Pineapple, 3 cans for	79c	Mountain View Sugar Corn, per can	15c	BIG YANK SHIRTS All sizes on sale at each	95c	DRESS SHOES AND OXFORDS Children's Shoes, sizes 5-2 1/2,	\$1.29	
Monopole Yellow Cling Peaches, 3 cans for	89c	Glen Willis Tomatoes— per can	15c	OVERALLS—Each	\$1.29	Endicott and Honor-Built, at per pair	\$4.95	
Monopole Sliced Peaches 3 cans for	83c	Bulk Crackers, Salted or fresh per lb.	15c	OREGON WOOLEN MILL BLAN- KETS at \$7.95 to \$10.50		RUBBER SHOES— per pair	\$3.49	
Monopole Sweet Potatoes 3 cans for	74c	HONEY— per pound	15c	COTTON BLANKETS Each \$1.89 Large assortment of MEN'S BLAZ- ER SHIRTS Regular \$8.50, on sale at, each	\$6.39			
Monopole Solid Pack To- matoes, 5 cans for	89c	SHORTENING— per pound	17 1/2c					

THE PEOPLES STORE

M. MURRAY Mgr. Vernonia, Ore.