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## LET'S WRITE RIGHT!

A CURSIVE WRITING PROGRAM
DESIGNED FOR USE IN THE
DARTMOUTH PUBLIC SCHOOL SYSTEM
5
A THESIS
PRESENTED TO
THE FACULTY OF' GRADUATE STUDIES
SAINT MARY'S UNIVERSITY

IN PARTTAL FULFILLMENT
OE THE REQUIREMENTS FOR THE DEGREE
MASTER OF ARTS (EDUCATION)

BY
© LEO SHANE JAMES ARSENAULT MARCH 31; 1984

MASTER OF ARTS IN EDUCATION PROGRAM
SAINT MARY'S UNIVERSITY

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Approved:


Approved: $\frac{\text { Di, haeckel }}{\text { Dean of Education }}$
Date: aug 3,198.4

Many people contributed toward the successful completion of this cursive writing curriculum especially in its field testing.

I wish to express my personal gratitude to the following educators:

1. the Dartmouth Professional Development Grant Committee for their financial assistance,
2. the teachers who used this program as their daily cursive writing curriculum, and wo supported me throughout its operation,
3. to Mrs. E. McLeod, typist and sepretary of Prince Arthur Junior High School, who expressed a great deal of encouragement,
4. to my wife, who understood the importance of this work, 5. and to Professor B. Davies who gave me the guldance to complete this thesis.

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## ABSTRACT

The problem of handwriting legibility is discussed, including suggested criteria for categorizing such problems, and an examination of two current methods of instruction/remediation. Then the results of a questionnaire, which was devised to. ascertain the present grade levels and methods of cursive writing instruction, in the classrooms of Halifax, Dartmouth, and Halifax County schools, are examined. Tre ramification of the inconsistencies of these programs forms the last two segments of the thesis:

1. "The Design - Let's Write Right!" which involves an in depth description of the steps taken in writing the cursive Writing' text (from discovering the need, to designing and writing the instructional/remediation book, and finally using it as pilot project curriculum material) and 2. the cursive writing text itself "Let's Write Right!".

The problem of improving handwriting legibility has beex around for many years. D. Johinson \& $H$. Myklebust, and $S$. Kaminsky, and R. Powers, I981 have suggested that perceptual motor and memory difficulties have been the cause of inadequate handwriting for most students who write poofly. M. N. Milone, \& T. M. Wasylyk, 1981 have further suggested that inadequate handwriting arises as a result of ápor curriculum. :. .

The first suggested cause is indeed applicable to some students but for the majority of students who write poorly, it is the latter suggested cause which has contributed most to this educational problem.

Still at this present time, the Nova Scotia Department Of Education has not solved this curriculum problem. The Department has not shown favouritism to any one instructional method to be employed commonly by our educational system. This lack of a common curriculum has resulted in a great deal of confusiom among educators - that is, how to teach cursive handwriting, what method is best for the student, and what method is best for the system.

The goal of this work is to help solve this problem: to provide a common cursive writing curriculum that can be used by the entire elementary teaching staff, who are involved in: the teaching of cursive writing.

Indira Gajraj, 1981, was. most influential in designing this work. He belleves the criteria for handwriting legibility
should be based on letter formation, slant, spacing, and alignment. By using this criteria, this work is able to make no distinction between the causes which may contribute to poor handwriting competence.:

To re-emphasize the fact that many students do have handwriting legibility probiems, samples were taken of their work before and after the implementation of the design. v. Cuslicki, 1980, made clear step-by-step suggestions how best to collect these samples. (See Developing The Design). These samples were then evaluated for legibility that was suggested by Gajaxj, (1982). These evaluations needed then to be categorized before any curriculum could be designed. The ten most common errors in handwriting catalogued by John Newland and summarized in D. Hamell, and B. Bartel, 1978, were used to determine what difficulties the students were having. These difficulties were found to be common among the students: difficulties with the closing of letters, with the completion of loops, with the mafking of end-strokes, yith letter size and with the crossing of t's.

Also clearly"evident, was the hodge-podge of writing styles expressed by the students in these samples.

Having the opportunity to examine the writing materials • that had been used by these students' past teachers, I discovered the letter sequence in each program was notably different as well as the techniques used to demonstrate the formation of each letter.

What was dlearly needed was a seguence designed common curriculum. In my seafen to find if such a curxiculum existad and could it be used by our present academic system; two possible programs were discovered. E. Dubrow's, Learning To write, Book II, 1968; and" SRAtPenskilis II, 1962. See Developing The Design), However, they both did not satisfy my needs because:
a. their utilizing of the sequence approach was different. Dubrow suggests the Ietters or $p$ and fler formple should be taught together because they are swing-up letters. The SRA approach suggests the letters $a, ~ Q, d, d, g, "$ and $p$ should be taught together because they belong to the counterclockwise downcase group.
b. the letter Eormation is emphasized diffeŕently. The Dubrow method stresses to begin each letter with either an undercurve or over-curve approach. For example
c. the "lignment of the tall letters varies. For example the visth ordelvside. Also, would it not be wiser to teach children a uniform neight for all tall letters instead of shortening the letters $t$ and $d ?$ Thus, the word the would be written the and not the
d. pfesentation of new letters, combination of letters, and written words did not follow always the same pattern. e. visual -presentation. Both programs lack stimulating:visual aides that could motivate students in grades two to six.
f. content E The material presented would not stimulate the interest of such a wide age? span in the elementary system.

## HISTORY OF THE PROTECT

As an experienced elementary and junior high school teacher I have observed that a few students in all grades write very well for theix grade. The majority of students write fairly well for their grade while many students in all grades still write very poorly:

Early in the school year of December 1982, a questionnaire was sent by myself to twenty elementary school principals. These principals were randomy chosen from the cities of Dartmouth and Halifax, as well as from schools in Halifax County: Also randomly selected, were sixty-nine elementary school teachers, who were supposedly actively involved in the instruction of cursive writing, from the three given areas, according to the information from the above principals.

The questions sent to the principals were: . .

1. Of your teachers who have taught the same grade more than once, how many teachers are presently teaching cursive writing and in what grade?
2. Is one writing curriculum being employed throughout your school?
3. If there is. more than one method being used, how many different methods are being used in each grade level?

The results of these answers are presented on Table One.

## Table One



It appears from the above results that:
a. formal instruction seems to be concentrated in griades two and three, 94 plus $100 \%$ equalling 97 .
b. there appears to be little instruction in senior elementary (grades four, five, and six.). 228 plus $5 \%$ plus 8\% equals 11. 28

The following questions were sent to the randomly selected teachers who were presently teaching cursive writing.

1. What cursive writing method are you presently using?
2. Are you satisfied with your present progran?

The results of these answers are presented in Table Two and Table Three.

## TABLE TWO



From the results in Table Two, it appears that $13.3 \%$ of the teachers are using a single approach, 65.2\% are using a combination of methods to teach cursive writing and $21.5 \%$
gave no reply to this' question.
Table Three suggests that 70.3 of these teachers are not satisfied with their present program. $20.3 \%$ are satisfied and the remaining $9: 4 \%$ are neutral of those whonswered these questions.

The Nova Scotia Department of Education has issued a statement concerning the cursive writing curriculum in the province.
"There are several accepted letter formations for
cursive writing. $\because$ It is wise for a staff in a school to agree on the basic pattern to be developed."

From the above statement it is obvious that the Department of Education has not show favouritism to any one instructional method. This lack of a common curriculum commitment has resulted in a great deal of confusion in the teaching profession - that is, how to teach and what to teach.

Having a combined teaching experience of twelve years in the elementary, junior high and special education: branch of education, it has become evident to me that a common cursive writing curriculum is needed. The implications of various writing programs that our children are sibjected to, have resulted in many of our children displaying inadequate handwriting competence.'

Many causes of this inadequate handwriting can be broadly categorized into two groups:

1. those which be within the student, such as perceptual motor and memory difficulties (Johnson \& Myklebust, 1967; Kamensky \& Powers, 1981), and;
2. those which, arise as"a result of poor instructional practice (Milone \& Wasylyk, 1981).

The primary goal of this thesis is to present a method of instruction which will help teachers instruct children on how to write legibly. This thesis will make no distinction between the causes whiç may cantribute to poor handwriting competence. However, it will be also of benefit to those children who are experiencing handwriting difficulties, such as, reversals, omissions, or poor spacing which are age appropiriate. (Indira Gajraj, 1981).

The criteria for legibility which is emphasized in this method, deal with letter formation, slant, spacing, and alignment.

- Understanding that some letters are more difficult to write than others, the sequence in which these letters are presented, the combination of these letters, the introduction of words and finally the writing of full sentences, is important. In 1968, Dubrow had developed a sequence based on the number of movements in the production of cursive letters. However, this letter formation design utilized a.sequence based on the similarity of the initial stroke in the production of cursive


## letters:

The author knowing the value of such a sequence curriculum believes that if such a curriculum can be adopted, better writing legibility will be executed by Euture students.

## DEVELOPING THE DESIGN


#### Abstract

When I first began to teach a split grade three-four class in 1982 , I soon realized that the writing legibility of a few students in ach ade was very good. The majority of the students wrote fairlif well and the rest of them wrote very poorly. I not only used my teaching experience to determine their legibility level but kaminsky and powers (1981) in their work on handwriting remediation had written suggestions which teachers could use as a symptomatic measurement of possible handwriting. difficulties. I found six out pf their sixteen signs helpful in determining what students had handwriting problems. 1. Wrequent referral to an alphabet chart. 2. Confusion in directional orientation such as mirror writing and reversals. 3. Poor use of space observed in sprawling or cramped writing, inadequate space between letters and words, inap-. propriate letter size relationships, and inability to stay within head and base lines. 4. Poor letter connections and illegible letters. 5. Inaccuracies, such as letter omissions, perseverations, lack of punctuation, and line skipping. 6. Hesitation and difficulty in generating letters in a non-copying writing task, particularly capital letters.

I then made an assessment of their handwriting


difficulties. Following the recommendations of cieslicki (1980), I collected samples of the children's handwriting. These recommendations were followed explicitly:

1. A sample typical of classroom work;
2. A Anear-point copy-book or teacher-made copy (e.g. ditto sheets) ;
3. A far-point copy - that is, the student copies from a chalkboard at a distance;
4. Dictated paragraph - that is, the student writes from material dictated to $h i m,{ }^{\prime}$ and;
5. Self-generated paragraph - that is, the student: writes a story on a topio of his own choice.

The samples of handwriting were collected and then
evaluated for legibility. The criteria for legibility included the following from Gajraj, 1982:

1. Letter formation
(a) Are letters too rounid, too thin, etc.?
(b) Are beginning strokes, connecting strokes, loops properly made?"
(c) Are upper case and lower case letters properly made?
2. Slant
(a) Do letters slant too much to the right; or to the left?
3. Spacing
(a) Is there enough space within letters?
(b) Is there enough space between letters (words)?
(c) Are words and letters arranged properly on the page?
4. Alignment
(a) Are letters (words) off line?
(b) Are letters (words) properly placed on the writing space?
5. Line Quality
(a) Are the lines too heavy, too light or variable?

The specific kinds of difficulties which a particular child demonstrated had to be identified before any remediation strategies could be developed. This information was obtained by using the ten most common errors in handwriting catalogued by Newland and summarized in Hammill and Bartel (1978) as a guide. These exrors include difficulties with the closing of letters, with the completion of loops, with the marking of end-strokes, with letter size and with the crossing of tis.

Upon examinjng their writing samples I quickly discovered a hodge-podge of writing styles; styles which later coula be aftributed to four different methods by previous teachers. What style would I adopt to further improve their cirsive writing lessons? If I adopted one style what would happen to the students who had been taught differently? Was it too late to introduce another method
which perhaps could combine the best of many methods and which have many similarities for improving legibility? ? Or, as I became more involved, in this assessment, could a cursive writing program be designed so that children throughout the Dartmouth School system could be taught using-this method?

As I soon discovered, theix previous years' teachers had used many methods ranging from the McLean's Writing' series to, current educational material, supplied by a local teacher's supply store. When I examined the contents I found that of ten they had little in common. "The sequence. that each letter was presented was notably different and the techmiques used to demonstrate each letter as well as, the practice of each letter, the combination of letters, writing words and finally sentences were often not related. Not only did theseimethods of instruction vary but I later found that much of this material was not of educational value.

Of vaxious reading materials that came to my attention particularly interesting was E. Dubrow's, Learning To Write, Book II. Durbrow (1968) had developed a sequence based on the number of movements in the production of cursive writing: Lower case

1. The swing-up-letters: i, u, w, t, r, s;
2. The swing-up-and-over-letters: $n, m, v, x$;
3. The swing up-and-turn-back-letters: e, $1, b, h, k, f ;$
4. The swing up-over-and-turn-back-letters: $c, a, g, d, q ;$
5. Some more swing up letters: 0 , $\mathrm{p}, \mathrm{j}$;
6. Some more swing up-and-over-letters: $y, z$;
7. The upper case letters followed.

The SRA Penskills II (SRA, 1962) utilizes also a
sequence approach as follows:

1. curved up stroke i, u, w, t, j, p;
2. counter clockwise downourve a, $0 ; \mathrm{c}, \mathrm{Q}, \mathrm{g}, \mathrm{p}$;
3. $\operatorname{loop}$ e, i, b, h, k, f;
4. upstroke that forms a point $r$, $s$;
5. hump $\dot{n}, \mathrm{~m}, \mathrm{y}, \mathrm{z}, \mathrm{x}, \mathrm{y} \cdot$.
6. the upper case letters followed.

I became so impressed with the above authors that I decided to instruct my students with a sequence approach. However, during my close examination of these methods I not only found their approaches different, but their handwriting alphabet which directed the students on how to make and how to check both lower and upper case letters for correct form, varied too.

Having had experience with children's handwriting I had always found it easier to correct words if the students used a "lead in" approach, that is "a" vs "a", or "e" vis "c". Therefore, I decided to abandon all the other approaches and formulate my own developmental style' of letter formation. The alphabet-letter formation adopted was as follows:

Once the alphabet-letter formation was decided, it was necessary to determine what sequence approach would be used. : Unlike many methods which began with the letter "a" and continued through to "z", I utilized a sequence based on the similarity to the initial stroke. These were as Follows:

1. $, t, \ell, \ell, \mu, \mu, N, N$
$2 \cdot b, A, b, d$
$3.7,7$
$4, a, c, d, \infty, q, q$
$5 . Q, C, O, E$,
$6 . m m$ viz $z$
$7, \notin \mathbb{B}, \mathbb{R}$
2. al, $b$
3. y. ip
4. $\varnothing, \mathscr{L}$
5. $72, \eta, 2, \eta, \pi, x, y, z, x, x, 2$

Each letter was presented in a series of nine progressive steps:

Step 1: The cursive'letter was introduced on a double space beside the same printed letter.

For example,


Step 2: Specific directions were given on how to write. the new letter by using arrows.


Step 3: The students practiced the letter by tracing the letter:


Step A: The students were asked to complete the missing part of the letter.


Step 5: The stuaents were given a writing example and were provided ample practice space.


Step 6: The letter was combined with any letters previously taught. Using the letter, $t, i, e, f o r ~ e x a m p l e . ~$

stop 7: Once two or more letters were known written words


Step 8: As soon as enough words were introduced as well as the capitial letter $I$, sentences were written by the students.


Step 9: The letters were reduced to one space at the end of each lesson so that children who were able to write with such fine motor skillis could progress at their own rate.

Step 10: Suggested language arts activities relating to the letter in question culminated the lesson.
*.
The above program was presented for one twenty minute session daily. The results as one might expect were in its favor. However, what was most outstanding was the legibility carryover into other academic subjects.

At the conclusion of that' academic year, I was asked to teach grade three. Unlike grades four, five and six, cursive writing was expected to be taught as laid down by the Department of Education. However, as earlier stated
in the introduction, this Department had not shown favoritism to any one method.

What method would I use? As' I examined the various methods employed by my school, I decided to use a revised version of my grade three-four program that $I$ had developed.

I applied to the Dartmouth Curriculum Development Grant Cominitee requesting financial assistance to carry out a design that would incorporate my previous work, and yet be applicable to grades two to six. . The financial assistance to purchase a vast amount of paper was awarded. Once the design was completed the paper was used to photocopy the original material. Booklets were then provided For each individual students:

In order to prevent "dating" the curriculum $I$ chose as my unifying theme animals and their behavior. Each letter was used to represent a particular animal's. characteristics or behavior.

The letter theme was introduced in a story fashion. - This capitalized on having a cursive writing program which recognized and emphasized the reciprocal relationship between reading and writing.

I used these stories to increase my students' general knowledge, oral and reading vocabulary, and in addition to provide them with a model for story writing. After reading and discussing each presentation I concentrated on the
actual letter formation, utilizing steps one to nine previously described. To reinforce the factual bits of information, lang age arts activities were sometimes included, which in turn would reinforce the use of the specified letter.

The legibility results af, this cursive writing curriculum have been most positive: At the end of each unit I collected a sample of 'my students' writing. "The following conclusions are drawn from these samples.

1. The excessive number of erasures has decreased
2. Confusions in directional orientation such as mirror writing and reversals are non existent
3. Sprawled or cramped words are nil
4. Adequate space between letters and words is evident
5. Appropriate letter size relationships are adhered to
6. Line skipping has been terminated
7. Letter omission lis no longer practiced $\because$
B. All beginning strokes, connecting strokes and loops have improved
.9. The letter slant has become very good
8. The alignment of 611 letters has dramatically improved. This curriculum introduced such techniques which not poly served as an instructional tool for children but served as an aide to children with handwriting difficulties. The teacher will use it best in helping students to discover
a learning situation as an incentive far practice, and to promote the development of legibility on the part of the student so he will consider the reader of his written work.

Having had success with my program; I approached two teachers of: grade two; two grade threes; one teacher for each grade, four five, and six and one teacher of a learning disabled class, to use this design in their classroms. one resource teacher, who was looking for such a program volunteered her student The total participants were as follows.

TABLE FOUR


I followed the recommendations of Cieslicki (1980) as I had with my own class and collected samples of the children's
handwriting. The students work was then evaluated for legibility following the same criteria for legibility that I had earlier used (Gajraj, 1982).

These results are found on Table Five.


The curriculum was given to each student in a booklet. This booklet had the first twenty lessons. At the conclusion of the twentieth lesson a sample of the students handwriting (cieslicke, 1980) was collected. Ihese results were evaluated for legibility: See Table six;


The teachers were then asked to complete an evaluation of the program. The results are found on Table. Seven.

TABLE SEVEN


The following conclusions can be drawn from these samples.

1. The excessive number of erasures have decreased. in"these grades as well as. special classes.
2. Confusions in directional orientation such as mirror writing and reversals have lessened greatly.
3. Sprawled or cramped. words are almost non existent.
4. Adequate space between letters and words is evident,
5. Appropriate letter size relationships are adhered to.
6. Line skipping has been almost terminated.
7. Letter omission is no longer practiced.
8. All beginning strokes, connecting strokes; and loops have been improved:
9. The letter slant is very good for most students.
10. The alignment for most letters has dramatically improved.

SELECTED BIBLIOGRAPHY
Cieslicki, V. Working With Children With Handwriting Problems: Academic Therapy, 1980 15(5), 591-596.

Dubrow, E. Learning To Write, Book II. Cambridge, Mass : Education Publishing Service; 1968.

Gajraj, I. Remediation Of Handwriting Difficulties. Special Education In Canada, 1982, 56(11), 16-18.

Harmell., D \& Bartel, N. Teaching Children With Learning and Behaviox. Problems, 2nd, Ed. Boston Allyn \& Bacon, 1978.

Johnsö, $\dot{D} . \&$ Myklebust, $H$, Learning Disabilities: Educational and Principles and Practices. New York: Grune \& Stratton, 1967.

Kaminsky, $S \therefore$ Powers, R. Remediation of Handwriting Difficulties: A Practical Approach. Academic Therapy, 1981, 17(1), 19-25.

Milone, M. N. \& Wasylyk, T. M. Handwriting. Teaching Exceptional Children, 1981, 14(2), 58-62.

Nova Scotia Department of Education. Manuscript and Cursive Writing in the Elementary School, A Teacher's Guide, 1971.

S R A Penskill II. Chicago: Science Research Assoc., 1962:

THE GNDER CURVE FAMILY
UNIT ONE
m


The word insect begins with the letter "i". This is how we write the letter "i".


Look closely at this letter. How many steps it take to make this letter?


That's right! There are four steps. Pisk up your pencil and trace this letter.


Can you complete the letter by using all of the steps?


Don $t$ let this" insect "bug" you. Write this letter as neat as you can.




I have four chunky legs and a short fleshy tail. My head is covered with scales:. I have small beady eyes and. my mouth has no teeth. My color is either brown, black, or olive green.

There are over 250, kinds of me found on tand, in fresh water, or in the ocean.

I am a reptile. When there is danger, I can pull my legs, tail and head into a shell.

Yes, I am a turthe. Here is a space to draw me. I hope you make me look nice. I think all drawings of turtles should look nice.

Turtles are sometimes called by another name: . It begins with the same letter as the word turtle. Perhaps
you have read the famous story "The Tortoise And The Hare"? Do you think
 you know the letter? of course you do! It is the letter "t".

The letter "t" is really something to sing about.


Here is the letter "i" again. Will you finish the letter so Mr . Turtle can sing a song?


You already know how to write the letter "i",

The letter "t" will be just as easy as pile.
7.

Look again. You can write the letter "t", in four


Trace a few for fun. 1 - 2.-3-Gol


How well can you complete these letters?


9.



The Heavy Dancer!
8. $r$


## $3 \ell$

Gloria has been dancing for many years. Her 3 meter high body often twirls around the stage. Unlike most dancers, Gloria cannot jump. It is difficult for any elephant to. jump because they weigh about 5 metric tons.

Meters of beautiful material make up her costume. This helps." cover her tough, wrinkled, grey. hide. Since elephants have little body hair she usually wears a tiny bow on her head. However, her 12 centimeter long eyelashes are really attractive.


Thelma likes to cook for relaxation. f Her keen sense of smell helps her create delicious snacks. Her: flexible trunk is able to pick up and carry 200. kilograms of food to her hungry mouth. Maybe, that is why she belongs to the largest land animals in the world.


You already know how to print the letter "e".
The writing "e" is just as easy. It has three steps.


You already have written " $i$ " and "t", by tracing this letter, you will know three.
$\qquad$


Complete these letters for Gloria.


Your turn to be on the spot light.


Three letters are better than two.


# Practice these letters separately. 

Have you ever seen letters joined together like this? Give it a try!


Write your best letter "e", "i", and "t" in the Balloons below.



Some people say that an elephant never forgets. How. is your memory? What do the letters "t-i-e" spell? That's right! The word is tie, Here is some practice space. Don't forget to do your best!'


So, You Think You Have A Problemt •
Kingly, is a clever lion who gives advice. As a dally column writer. for the Mane Attraction, he receives many roaring letters from unhappy lions. Sometimes he receives ten pawblems a day.

Today, Kingly is sick with jungle mouth. Will you take his place and discuss your purr-fect answers with your class?

18.

Dear Kingly,
My mane is a mess! I have visited the best manedressers in the jungle. No matter what they try, $I$ still have the Erizzies. What can I do?

Brillo Heãa

Dear Brillo Head,


Dear Kingly,
I'm in love with a cutè cat. Whenever she sees me, I'm just lioning around: I don't want her to think that $I$ m lazy. What is your advice?

- I would be lion if I said, "The word lion does not begin with the letter "1". Do you remember how to print the letter "I"? Here is the printed letter "1". and the written Ietter "I".


Does the writing letter "l" look like a large "e"? Follow the lion's tail to the end 'to see for yourself.


As king of the Jungle, this command I give, "The writing letter "l" shall be made in three steps."


Give a big roar when you have traced this letter.


Do you have enough courage to complete this letter all alone?


After you have practiced the letter "1" in the space below, write your best "l" on Kingly's sweater.



Kingly Impresses Louise; Even More:







Imagine yourself on a magical ride
Playing in clouds so high.
Imagine yourself taking a rest
Watching the stars.shoot by.
Imagine your friend with his strong white horn
Flying for all to see,
Imagine the fun that could be had
Your friend, yourself, and me.

Like you, a unicorn has two eyes. The word unicorn begins with the letter "u". Did you know that-the letter "u" is almost written like two "i"s joined together without their"dots?

Here is the printed letter "u" and the written letter "a"。


The letter "u" has four steps.


If you were a unicorn, you could dip your horn in some polka-dotted ink and trace these letters. Pretend your pencil is his horn and magically trace these letters.


A little completion would be nice!
$\qquad$





$\therefore$


MARY: Did you catch all those fish by yourself?




Hold an earthworm in your hand. Which end is the head?


You cannot see the worm's eyes, nose or ears because it doesn't have any. The worm's mouth is difficult to see.

Here are two clues which can help solve this problem. place the earthworm. on the ground. The head of the worm will be the part that goes first.

Here is another clue:
On the earthworm is a swelling. called the clitellum.


The clitellum produces the material that forms cocoons For the earthworm's eggs. The clitellum is closer to the head than it is to the tail.
; You may have had trouble finding the head or tail of the earthworm before you read the above. However; you can easily see the difference" between the printed letter "u" and "w".


Here are both these written letters.


By adding two more steps to the letter "u" the letter "w" can be formed.


Try tracing these letters.


Practice makes. perfect:

8


Practice makes perfect!


## Practice makes perfect:

ZW
EDO TM
UWV INT

## ZUW

Far in, …
Fiovin


## LESSON 9



Keep with It!

## ZDEV保?

ZOUTKY,

will wite
queen
wet sine tit
welter
wither.


LESSON 10

## A MINIATURE DRAGON?

Can you imagine a black, scaly dragon, one meter long? Once a day, it swims in the cool sea searching for rockcovered seaweed to eat instead of people. This creature does not use its webbed


4
feet to help in swimming. Rather, it dives deep into the

water by paddling its tail. Because it is a cold blooded animal, it spends the rest of the day basking under the sun. It remains on the warm, black rocks until its body warms up from the chilly sea water.

You really don't have to imagine such a creature. It exists on the Galapogos Island: It is an iguana.

The iguana has a big brother who is the "fairy tale dragon". The letter "i" has a big brother too. It is the capital letter "I".

The letter "I" is written near the iguana's foot at the top of this page. Can you find it?

By adding a few tail strokes to the written letter "I", you can easily write the capital letter "I".


Although the iguana is not large like a dragon, it is. not afraid of humans. In fact, if an iguana went to school, he would not be afraid of this letter. It would know that this letter can be smoothly written in five easy steps.


Show the iguana that you are not afraid to practice these letters.


U
Try completing your capital "I's".



Div"e Into These Words!



Iv will to ate
$\qquad$
It will hiv well.
$\qquad$
Turtle fieitivall
$\qquad$

Z will to it.

It will le well.
devil tell it well.


## LESSON 11



There is no doubt that some sharks can be highly dangerous. Sharks do occasionally attack a man, although such attacks are rare.

There are over 150 species of sharks found in all the seas of the world, but only four types might be considered 'a. danger to human beings: the tiger shark, the blue shark," the hammerheaded shark and the white shark (sometimes called the man-eater).

The white shark, can reach a length of forty feet ard a one hundred pound sea lion was once found in such a shark's stomach.

Sharks never run out of dagger-like teeth. The worn out ones are constantly being replaced by new ones, just behind the worn out ones. It is unlikely they will ever have need of False-teeth.

Do you think your dentist would volunteer to check a shark's teeth for cavities?'

Here is a printed "s" and the written ."s". This letter starts the word shark!


There is nothing "fishy" about the three steps it takes to make it.


Wrap your Fin around your pencil and"trace this letter.

49.

Don't forget to complete this exercise:

these.


You might be afraid to swim with a shark but' these letters are not.


You might be afraid to swim with a shark but these - letters are not.

'Let's Go Visit A School' Of Fish!

.. Copy each word in the space neatly.


54.

Let's Go Visit A School Of Fish!


Copy each word in the space neatly.

use :- . - lues.
it sell tissues.
$\qquad$
It uses less files.

It t let w us sell - ties.
$\qquad$
It is listless.


There once was a time whem the raccoon did not have a black band across its face. With the help of a magic belt, the Indian god, Glooscap; created the raccoon before all other animals.

The raccoon wanted the belt for himself and:secretly planned to steal it.

One hot, summer's day, Glooscap left his belt on a white speckled rock as he swam and played in the mighty river: Quickly, the raccoon grasped the dark belt"in his strong claws and ran into the deep dark forest.

57.

While running at a great speed the belt suddenly flew from the raccoon's paws and with a loud 'smack', hit the animal across both his eyes. This caused the raccoon such pain, that he fainted beneath a tall pine tree.
 to the south wind all that had happened. Within a moment, the south wind, whispered to the west wind who blew the news gently into the ears of Glooscap.

Following the tracks of the raccoon; Glooscap's mighty strides soon brought him to the injured animal: When Glooscap saw the swollen dark eyes of the raccoon,
he quickly lost his anger and became very sad.
"Because you wanted my magic belt, I will give you. one", bellowed Glooscap's mighty voice.
"You, and all your children's children will wear a belt of a thief for all times - for you have robbed yourself of my friendship!"

When the raccoon awoke, he wore the mask of a robber. This would remind him for all times, how a raccoon stole Glooscap's magic belt.

This'letter is at the beginning of the word raccoon.

You don't have to wear Glooscap's magic belt to make this letter.


Here's some to trace.


Complete these letters.


$\qquad$


Try Your Aim At Thesel





LOOPS ABOVE THE LINE
UNIT IT
66.


## BUZZING NEWSI

Did you know that a honey bee doesn't sting unless it has areason? A bee can carry more than 300 times its own weight. A. honey bee may visit more than 1,000 flowers on one food gathering trip. A bee must make about 4,200 trips to flowers in order to produce a tablespocon of honey. "Bee" a honey and look carefully at the letter "b".

67.

A honey bęe never rests until his work is finished.
These letters need to be traced. What are we waiting for:

complete the letter.


Can you write some "bee-tiful" "b's". wi thout help?


You will never "bee" stung writing a review.


John: What do you call a bee that is born in May?

Mary: I give up:
John: A."maybee".

$\leftrightarrow$


John: If you cross a hamburger with a bee, what do you

1 get?
Mary: A "hamburger".


## 69.

John: What do you call a bee that is born in May?



$\qquad$ 2. $\qquad$
$\qquad$
$\square$
3 $\qquad$

## AN INVITATION.

Did you ever take a hippopotamus to dinner? Would you ever be in for a surprise! when the sun begins to set, it is time for the hippos to eat. They eat for most of the night.

They like to eat leaves; grass, and grains which they ${ }^{2}$ find in swamps and near rivers. An adult hippo may eat as much as 68 kg . of green grass in one night. That's a lot of food! Dor you know that an adult hippo weighs about $3,200 \mathrm{~kg}$. or about as heavy as a family size car?

$\cdots$
bx


The letter " $1{ }^{2 \prime \prime}$ " takes the whole space.


This is how we make this
. . letter.



Don.t be caught all wet trace these letters and do your best.


Let's try something different. Complete these letters with the added letters "i" and "e".


Be a "big", winner and try some of these.

75.





A kangaroo's baby is called a Joey. He is so small. When he is born that he can stand on your thumbnail. What is, the first letter in the word kangaroo? Shout "Leaping Kangaroo", if you guessed the letter $" k$ ".


It is fun to write the letter "k"! It keeps Joey very busy. Sometimes his mother cannat find him. She, doesn't know that he is practicing his letters. This is how Joey
learned to write the letter " $k$ ".

his letters. Take your pencil and help Joey trace this letter.


Complete these letters for Joey.





85.

One day, Father returned home to tell his wife a sad tale. A gory, ten-eyed; five meter long bug had eaten their son, Toward.
"That's terrible", cried his
 wife, Gertie!
"Just Terrible".
"Oh, that's nothing" sobbed Father Frog! "You should have seen the one that got Away"!


Sit. tight on your lily pad and look carefully.


86.
$\nabla$

Your bulging eyes are needed to see how this letter is made.

Wrap your sticky tongue around your pencil 1 and trace these letters.


000
00
0
00


87.

88.


$\square$

CAPITAL LETTERS, T F
UNIT 3
90.

## LESSON 17

KISSING COUSINS


Toads and frogs are amphibians. They deposit their eggs in water, spend the early part of their lives as.tadpoles, and when they are fully developed, they can live on land and in the water. During the winter; they sleep in the mud.

How do we know who's who?' A frog is long and thin and usually has teeth. The toad is short and thick and has no teeth. If you touch a frog, his skim is dry and rough: If you touch the skin of a toad, it' is wet and smooth.

By watching a toad and a frog jump, you will discover that a frog jumps higher, faster, and farther than a toad.
91.

SThe longest frog jump on' record is over five metres.

Who do you think would win on a jumping contest? Draw a crown on the winner's head.

Unilike frogs, common toads can be tamed. With time and patience, toads will take bits of food from:people's`fingers and will even let their backs be stroked.


With time and patience what an easy time you will have writing the capital letters $T$ and $F$. fike the toad and the frog, these capital letters look alike.


Let's go. down to the swamp and see how these letters are made.


## 93.

GET HOPPING ON THESE LETTERS:

$!$


$$
\frac{Z A}{A+}
$$

$$
Z_{\cdots \cdots \cdots}^{\cdots}, \cdots \cdots \cdots \cdots \cdots
$$

$$
k>\cdots \cdots, \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots \cdots
$$


$\underset{\sim}{3}$




Fer Tow

Flat:-:- Flare. $\qquad$



101.

there: $\cdot \cdots \cdots \cdot$


Fretro :-
Test - - - - .......

$\qquad$
heriv
heir. $\qquad$

herself.
hiter
$\qquad$
harit.
thiffi
Kulle

$\qquad$



zrasery

3
-

First, El will te it:
$\qquad$
$\qquad$
Ther io the wheildel.
$\qquad$
$\qquad$
Zlitter tho lithe tisues.
$\qquad$
$\qquad$
Their-turtlo is teriville.
$\qquad$
$\qquad$


This is the true heir.
$\qquad$
$\qquad$
Zoo with eraser the thistle:
$\qquad$
$\qquad$
$\qquad$
is aselew.
$\qquad$
$\qquad$
Thew in the first terrier
$\qquad$

This felea eis fhesth
$\qquad$
Hithe the tysfl:
$\qquad$
Fit iv frow fruit
$\qquad$
Thew is-the thelliw.
$\qquad$



What would you look like if you had a'lunch pail sticking up out of your back? Look up at our camel, Felix. His lunch pail is called a hump.

When Felix cannot find enough food to eat, its body uses the stored food in his hump. Do you think Felix stores water in his hump? Felix's hump is After this lunch, filled with stored fat. This gives Felix a reserved energy supply


Draw a hump for storing food on your back in the space below.


The word camel begins with the letter "c".


It looks like the printed letter "c", but something has been added. Can you guess what?


How about completing these letters.


If you complete these correctly, you deserve a drink,


Sometimes a camel has two humps. Write another letter with the letter "c" in the space provided.

$\qquad$





Choose one of these words to complete the sentence.


## 116.

## JESSON 19

Eggs; Eggs, And More Eggs!
B. How would you like to crack open an egg and find a complete baby alligator? This baby wha looks exactiy like his parents will grow to be about 6 metres long and may live to be at least, one hundred and fifty years old.


When these eggs are layed by the mother alligator; she does not sit on them like a bird sits on her eggs." Instead, she gathers rotting vegetation and covers her eggs, which may be as many as forty.

Under: the hot sun. this swamp vegetation is like a hot house. This great warmth helps in the development of the alligator inside the egg. The eggs are kept covered for
117.
about fourtelen weeks. The mother watches over her eggs and leaves the nest only to eat or when she has to take a swim to cool-off from the hot sun. When the baby alligators .hatch, they make a sort of croaking sound. The mother carefully uncovers the opened eggs and gently picks up three or four lively: 25 centimetre baby alligators, in her mouth, and brings them to the water's edge. For many weeks, the alligators can be seen swimming behind their mother or. "crawling all over their mother's body.


In the first five years, the alligator will grow about 30 centimetres each year. Then their growth slows down, until they only grow about two centimetres a year.
118.

The letter "a" is the first letter of the alphabet and an important vowel. Alligator begins with this letter.


The letter "a" is not a problem for "a" lovers."


Trace these letters carefully before the mother alligator closes her jaws.


Finish these letters carefully,
$\rightarrow$


Write the letter "a" on the alligator's back.

$\qquad$

-     -         -             -                 -                     -                         -                             -                                 -                                     -                                         -                                             -                                                 -                                                     -                                                         -                                                             -                                                                 -                                                                     -                                                                         - 

$\qquad$
120.


Z
$a$



Alligators do not like to play alone and neither does the letter "a". Here are some of their friends.


aback
acciots
aurial
affect
ain
affelfo -


Dre
ashes -
aftic $\cdots \cdots$
auke $\cdots \cdots$,
ousfute $\cdots \cdots$

Who's Afraid of A Darning Needle?

How many times have we heard someone yell, "look out, there's a darning needle!" And how many times have we all run for cover?

Despite our fright, the darning needle or better known as the dragonfly, will not harm us. In fact, the dragonfly destroys one of our worst summer pesbs, the mosquito.

Dragonflie's live around swamps and other places where. the water doesn't move fast. Flying in the airy with the help of two, pairs of wings on their long narrow bodies, they catch mosquitoes and other small insects, with their legs and jaws.

Although their powerful jaws can be seen chewing their prey, these insects, do not bite nor can they sting. They are harmless to us.


4

Doesn't this"letter look easy? Show how easy it is by tracing these letters.

you don't need your teacher to finish these letters.

127.

Like a pretty dragonfly, a good "d", is hard to forget.

$+$



It's definitely better to have two darning needles. around than one. Here are some letters that like to be seen with them.



These words can be divided into syllables. Write your answer on the first space after the word. , cheak your answer in a dictionary. Write the whole word on the second space.


$\qquad$
$\square$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

$\qquad$
$\qquad$

$\qquad$
$\qquad$ $\because$
$\qquad$

$\qquad$
$-\infty-\infty-\infty$
$\qquad$

You're Flying Now!
Copy each sentence carefully.
That durant ate the dantean:
it detest this difficult diet :-a
$\qquad$ This is al drat date:-
$\qquad$
$\qquad$

## There is the delicate der:-..

TALL, TALLER, TALLEST!

The : tallest animal living in the world today is the giraffe. A male giraffe is about five metres from the top of his head to the ground. He is about three times as tall as a 183 centimetre, man.

All four thin legs of this gentle animal are of the same length although the front legs appear to be longer.

The writing: letter "g" is very" similar to the printed."g".


The letter " 9 " is very easy to write because you already know the letter "a".

Sit nice and tall and trace these letters.



138.

These letters are inseparable. practice these well.

$\qquad$

139.



This in great jartic bread
tth-urith get the gate:

There are gratelut giraffes

The glam is glace.




145.
guitar, - guisu
gfide:-.... gien:
giut. gristle.
Juriteri
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## LESSON 22

## GONE, BUT NOT FORGOTTEN!

The qaugga is now extinct. Extinct means: no longer living or surviving. What was a quagga and why is it now extinct?

The quagga was a mammal who was related to both the zebra and the wild ass

O
It was an attractive animal; with chocolate brown stripes on the neck and fore part of the body. These stripes faded to a plain reddish brown coloring on the hind quarters. Except for the black and white stripes of a zebra, it looked like a zebra with a bushier tail.

In South Africa there were many quaggas until the mid 1800 's. Now there are none. They were killed for food and . for their hides.

Do you know of any other animals that were once plentiful but are now extinct?. In the space below, tell about this animal and draw a picture for your classmates to see.

$\$$

148.

The letter " $q$ " is ap odd letter.

the line.

$\qquad$
 need tracing:

over the body; complete these letters.


your own.



This letter likes company. Practice joining these letters.








## 153. 童

Write the correct word in the space after its definition. The cry of a duck.

$\qquad$

A small game-bird.

To tremble or shake

$\qquad$
A disagreement


An extinct zebra-like animal


To divide into fourths

Anything made up of four
$--------$


Without sound ${ }^{\circ}$

A bed-cover
quilt, quiet, quartet, quack; quake, quail; quagga, quarrel, quarter, quest.
quach $\qquad$
quait.
qualified.
quancel:
quant.
quew
quict.
quilt:


Can I Give You A Hand, Hand, Hand; Hand, Hand, Hand, Hand, Hand?

$\therefore \quad$ Every octopus has eight snakelike tentacles or arms, which are held together by a web which surrounds its mouth. The octopus $\dot{\text { pes }}$ its eight arms to catch crabs, clams,
lobsters, rand other sea animals. These arms are used to break open its victims shell and then quickly sweep the contents into its hungry mouth.

On the underside of each arm are round muscles. These muscles can hold onto anything the octopus catches because these musclès are like suction cups:

156.
"The over-curve makes the letter "o" fun to make.
$\qquad$

examine this over-Curve

practicing letters would be just as easy. . Try your hand at : tracing these.

letters.

\% Write some letter "o's" on the lines of the octopus's







The letter "o" is. missing from each word. Trace the letter "o" and join it onto the next letter. Write the word. in the space provided.

$-\quad, \quad 162$.
agre
A
ab
td
$\qquad$
$\qquad$
$\qquad$
artricht.
a $\qquad$
outs


| atb |  |
| :---: | :---: |
| act |  |
| ad |  |
| m |  |
| Af |  |
| ay. |  |
| ath |  |
| , |  |








How Do You Feel About These Letters?

$\qquad$

$B$

$\qquad$
Raw.
$\qquad$ $4 / 4 / 4-\cdots-\cdots+\cdots$



$\qquad$
$20 O_{x} \cdots \cdots \cdots$
$\qquad$
WO
wort $\cdots$
wire:............


Hey! You Forgot About Us!
$\square$

.4


Ta $\qquad$ ${ }^{178}$
$\qquad$
Ho $\qquad$ Fe
The $\qquad$ Zur
Tiv $\qquad$ Fo
．

Zo．
丑 $\qquad$
西： $\qquad$证 $\qquad$
The：


㫛：

Zo：

LESSON 25

## THE TOOTHLESS EATER

"M-m-m, this ant is delicious:" says the odd-looking anteater: . This animal does not bother to chew his tasty luach. Food cannot be chewed by an anteater because anteaters have no teeth.

Attracted by the smell, the anteater gets its food by. tearing open rotten logs and large anthills with its heavy claws. $\because$ Besides ants and termites, this animal also eats their dinner's soft larvae. This larvae is full of protein.

The mouth of this
curious animal is a
small hole in the end of
its snout. Through this
opening a $60 . \mathrm{cm}$. tongue whips
in and out. This active tongue is
coated with a thick sticky saliva. As the tongue prods every


The capital letter A is a letter you will use often.


This letter is a very important letter.


- It begins fat the top of the line and makes a down-curvestroke. It then travels straight up to touch the point. where the letter, began. It retraces this straight line and continues



Don"t let yourself be like an ant and get stuck on this letter:


Two letters are better than one!

$$
\operatorname{tin}_{\cdots} \cdots-\text { Ger }^{\cdots} \cdot \cdots
$$





Write the letter and then write the name of the thing under it. Use the $A$ capital letter to begin each word.


## SOMETHING TO CROW ABOUT!

What's black, flies, and goes' cawCaw? The answer that most chsildren would say is a crow.

What's black, flies, goes Caw-Caw and is a thief?" This ridinle might stump you. But the answer is again, a crow.

Although crows will eat grains and fruit, they love eggs: Crows will visit the nests of laying farm hens and spike the eggs with their beaks. They then will fly to a safe place, with the egg and drink the egg's contents.

Although crows eat harmful insects,
do you think farmers like crows? Write your answer in the space below.
$\qquad$

Here is the capital letter $c$. It is not a vowel like the capital letter A. It is a. consonant.


This letter starts with a little loop at the beginning of the letter and the line continues to curve toward the left, down to the line and curve under up.


Complete this letter.


Often a crow is seen in the company of other crows. They often fly in flocks, and, they can be found roosting together at might. Let's'roost the Capital c and small $c$ a. together.


Flap your arms before you begin this exercise.

.285.
fere is a list of things a crow might eat or drink
Write each word in the space. Circle your best writing words.
Cabbage:
Carcass.
Thorolater.
Treat:
fomenters:
Cheese.
Coffee.


Onscramble these words and then write them in the space.


EGGS, eGGS, AND MORE EGGS


Birds that build their nests on the ground nearly always produce $\qquad$ eggs. These eggs will blend in well with the area around the nest.

Birds that build their nests in trees or bushes will often lay eggs that are $\qquad$ Or $\qquad$ ,
so that the eggs are' less visible'. They will blend in with the leaves.
$\qquad$ that build their nests hidden away.
spotted
bluish or greenish white

Look up in your dictionary the word oologist? What would you do if you were an oologist? Write your answer on the i ines below.



This capital letter $E$ is really fancy to write. It has lots and lots of curves. It is a vowel, too:
'Get cracking' "and watch how this letter is written.


Don't' wait around for these eggs to hatch. Practice tracing the letter: E .


How about jumping out of your nest and complete this letter:


Big eggs and little eggs!
Big letters and little letters!
(a)
$\varepsilon^{c} \cdots \cdots \cdot d^{-\cdots}$





$\varepsilon_{1} \cdots \cdots \mathcal{E N F}_{\cdots} \cdots$

Just like there are lots and lots of eggs, there are lots and lots of words that begin with the letter e.




WHOsO! WHO -On WHOsO!
Who looks like a wise old bird, with very large eyes and has feathers that look like heavy eyebrows over its eyes?


Who is this only bird that blinks the way a human does by lowering its upper eyelids?


Who is like all other birds, and closes its eyes by raising the lower eyelid, when it is time to sleep?


Who is this bird whose eyes cannot rotate but must turn its head to look sideways?


Who are these birds? These birds are the same bird. It $A$ is an owl.

Draw the owl in the box below.

194.

Although the owl loaks smart, geese, crows, and ravens are all smarter than owls.

You are a lot smarter too! Look at these capital o's.


Trace this capitai letter.


$O$
$\qquad$
On. F: Oate.
OF:- Ohetacel.
On:- Ocloct:
Od:---Odd.


Rearrange these words, Write them in the correct
alphabetical order in the space underneath.

Words

1. Otter
2. Orbit
3. Odd

4: O'clock
5. Oar
6. Ourself
7. Sofficer
8. Oboe

Alphabetical order
$i$. $\qquad$
2. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$

## REVIEW

Find each word in the puzzle and dxaw a line around it. Then write the word on the line by the number.


THE OVER-CURVE DOWN STROKE - n , $\dot{m} ; \mathrm{v}, \mathrm{x}, \mathrm{y}$; z UNIT 6

## LESSON 30

THERE IS NO PLACE LIKE A NEST:

## REPTILES

 humus (decaying leaves or grasses) or rotting logs: These nests can be crudely made, or a scratch in the soil, or as carefully as a mounded nest. In the space below, draw a mother reptile and her eggs in the nest.
## BIRDS

Of ail nests built, birds build the most amazing ones. The smallest bird's nest belongs to the hummingbird. It looks like a tiny cup, about the size of a thimble, and made from moss, licken (a small led fess plant growing flat on rocks)
and spider webs:
The largest bird's nest belongs to the scrub fowl of Australia. These nests are mounds, which can be larger than a man.

- Draw your fav̈ourite bird and eggs in the nestr in the space below.

- MAMMALS

Many mammals, such as rabbits or foxes raise thier young in burrows. (a hole in the ground) But some mammals build their nest above, the ground. They pile plants into molds and inside each mold is their nest.

In the space below draw a burrow that a rabbit would want to live in.



This letter is as interesting to make as nests are.

## cnrmm

Às Careful as a bird builds its nest, trace this letter "n".


Would a reptile like to have her young live in an incomplete nest? Complete this letter.


$\qquad$

$\qquad$

$\qquad$


## LESSON

LET'S MOVE ON:
Each year millions of animals make long journeys called migrations.: Why do these migrating animals travel so
far? They travel for food, to.
breed or to escape the cold winter.

## LAND TRAVELTERS

When the cold winter comes; great herds of reindeer leave the Artic and find food and shelter in the forests in the south.

Go into your 1 ibraxy and find a book on reindeer. What do reindeer eat? Write your answer in the space.

Reindeer Food
. 1. $\qquad$ .
2.

3.

AIR TRAVELLERS


At least 1000 million biras migrate in the fali, to southern locations: A bird like the warbler can fly more than 1000 kilometers without eating. It gets its" source of food energy from the fat in its body.

When you are in the library look up the word migration. Draw a map of the flight of any migrating bird. Don't forget to label your drawing.


OCEAN TRAVELLERS
The salmon swim down from the mountain stream where they are born to the ocean. They live in the ocean for one to five years. They, swim in the ocean from 25,000 to 250,000 kilometers away from their birthplace. Then the salmon swims back to the stream they were born, to spawn.

What information can you get from the library about the life-cycle of the salmon? Write your answer in the space below.




Here is the letter "m".
It is very similar to the letter " $n$ ". Do you know shat is different?


Trace this letter



Using the letters that you already' know, complete this paragraph.
--The Gold:


 and most of them are harmless. These flying creatures feed on insects or fruit and some even sip the nectar of flowers. The vampire bat is different from all other bats. It lives entirely on blood.


This vampire bat sleeps during the dark in dark places such as caves, the eaves of houses, or some other dark places.

When darkness comes, the vampire bat searches for its victims. When the bat aiscovers grazing cattle or a sleeping human, it"flies to them where it quickly bites them aftex carefully selecting the spot for its bite. This painless bite causes the blood to flow.

Just like a cat lapping up milk, the vampire bat laps up. the blood.

In the morring, this vampire bat is back in its dark. resting place. The victim have been unharmed because the amount of blood taken by the vampire is very little.


The word vampire bat begins with the letter "v".


The letter $v$ has the same beginning as the letters $n$, $m$ and $x$.


Trace these letters

$\qquad$

+


3


Here iss an interesting thought. "The letter, y joins the five vowels a, $e, i, 0$, and $u$. The five combinations are given below by themselves and in words.

$\qquad$
$\pi N O-N O$
$\qquad$
QU:- N:- N:
$\qquad$
vase $\cdots \cdots$
wet t $-\cdots-\cdots-\cdots,-\cdots$
vine $, \ldots, \ldots$
Doter $,-\cdots,-\cdots$
vulture. $-\cdots, \cdots-\cdots$

WHAT'S WRONG

Can you find what is wrong with this picture? Write your answers on the spaces below.


## BEARDS FOR MAKE BELIEVE SANTAS

A long time ago in Great Britain, there were people who needed beards to play the part of Father Christmas. Father Christmas, is the British name for Santa Claus. From the far away country of Tibet, a great amount of yaks' tails * were sent to Great Britain. These tails were used to manufacture the beards for these British Santa Clauses.'

Here is a picture of Father Christmas, 'without a beard. Will. you add a beard to make him look like our North. American Santa Claus?


The yak usually lives in very cold climate. Don't you be left out in the cold not knowing how this letter is written.


The yak can walk in places where people Would not dare to walk because of the danger of them falling: There certainly is, no danger when you trace these letters.

ye: $=\cdots$

A cave drawing found 216.


Divide, these words into syllables.


maptory
byster
cuèr
weflable
typicale
aye


## LESSON 34

Below is an incomplete story. Read it carefully. close your eyes and see if you can imagine what will happen next. Write your idea in the space provided.
"Run for your lives," soreamed the young boy as he ran down the busy street. "The $x$.is coming this way."

People of all ages looked up in terror. Memories of what had"happened the last time the x had visited their busy seaside town sent shivers down their backs.

Suddenly, the boy's warning was useless. There it was, looking, at them with greedy


Although this strange creature is different, the letter $x$ is not very different from the beginning of the letters
$\because \quad i \quad$ and $m$.


Here is how the letter $x$ is written' Don't be scared to Hook at it


Try tracing these.


Why not complete these letters
before the $x$ comes and visits your town.


You'd better practice these letters before something eerie happens.


Don't wait any longer to write these.

QRQZ $-\therefore-7-\cdots--\cdots-\cdots$
$\qquad$
$\square \subset-\rrbracket \subset-\cdots-\cdots-\cdots-\cdots$


20.


An $x$-ray is a photograph that shows the internal parts of a human body.

Draw an $x$-ray of your creature's head in this space.

Let's be like an x-ray and copy these words exactly like they are written.
origen $\cdots,-\cdots$

and $-\cdots-\cdots \cdots \cdot$

Zurnoge $-\cdots \cdots \cdots$

zeylophione -


THE HORSE WITH THE MIGER'S STRIPES
One of the best known of African animals is the zebra. Almost all circuses and zoos have at feast one of these animals.

The home of the zebra is on the grassy plains of Africa. It is a grazing animal and feeds on the grass.

There are many kinds of zebras; which are chiefly different in the arrangements of their stripes.

Here is a picture of a zebra without its stripes. The belly and inside parts of the thighs are without these bands. Draw the stripes on the zebra below. Remember not to put stripes on its belly and inside thighs.


The lion is the zebra's worst enemy. The lion has to be very careful because a zebra can give the lion a few wellaimed kigks and that is the end of the lion. Let's look




Can you write a word that begins with these letter combinations? Use your dictionary to help you:



Compound words are two words that are put together to 'form' a new' word. Write each" compound on the lines.
mailman

-
meantwhile

**

|  |  |
| :--- | :--- |
| $\ddots$ | $\ddots$ |
| middletmán |  |

$\qquad$
middleman
$-\square-\square-\square-\square-\square$
-
$\qquad$
moonlight

mudatguard

|  |
| :---: |
|  |  |

nametsake

necktlace

notbody


## nuttcracker


ut
' w .
vantguard


vinetyard

volttage

$\qquad$
yourtself

,
zig+zag

THE CAPITAL LETTERS $P, B, R$,
UNIT SEVEN

```
PEEK-A-BOO! I SBE YOU!
```

Penguins are usually black with a black head and a white belly. These two colours help protect the penguins from their enemies.

When a penguin is swimming, their backs are facing upward.


To an enemy looking down on the water, the perguins would be difficult to see, The penguins black back blends in with the dark water.

The white feathered bellies of a penguin, also make them difficult to spot from underneath the water. If a shark or a leopard seal swims. underneath a penguin, the penguin will often go unnoticed. The \& penguin's white belly blends in with the bright light from the sky.


If they are "attacked in the water, they can leap ashore" like corks fired from a pop gun.

that penguin begins with the letter "p"." You already know
how to write the smali letter $p$. This is the capital "p".


When a penguin looks at something, it stretches its neck and examines the object - carefully. Don't strain your neck as you examine this letter.


Trace this letter, neatly.


Penguins usually spend all their waking hours in the water. Since your're swimming in any water now, complete these letters.









蒋

Write the following sentences with correct beginnings and endings.

- Took patrick to the zoo
To nee - some penguins.
patrick void he really thoughts




## USELESS KILLINGS

Although the rhinoceros is protected by law the body of the rhinoceros is so valuable to poachers. (people who hunt or fish, without permission) that. poachers hant the animal 'even though they will be punished if they are caught by the police.

The reason the rhinoceros is so valuable is because of superstitions. 4
Many people who live in Eastern countries believe that the rhinocer"os' horn has magic powers. "They believe that it can cure people who are sick and that the horn will bring good luck to anyone who holds it.

Some people believe that the animal's bloa is a very good medicine. The blood is collected in tiny bottles at the time of the kill and these bottles are sold for a lot of money.


238.

You don't need magic to write the capital


2


This is how it is made.


The horn of a rhinocerdf 4 s"made up of hair that has been 00 glued together. It could nyer have magic powers.

Trace these letters.


Complete these letters before a poacher tries to steam them.

$\qquad$
$\qquad$
P
$\qquad$
Rar: Coblit. $\qquad$
Re: , Reindew:
Phin Chine:
Ro - Rotin:
Ple: :- Rum:
Payer Ryyer



INSIDE. THE BEAVER'S DEN.
Beavers are the smartest builders in the animal world. enemies.
 hundred and fifty centimetres below the surface of the water. At the mouth of the tunnel, there is usually a heap of poplar and birch branches. This is the stored.witer food.

The tunnel rises gradually, into the bank, leading to a king of terrace and finally to the den. The den is above the water level.

This den or lodge; is a low, wide room, and its floor is 'oovered with wood chips.

The clever beavers also have a second tunnel which the beavers use if the first tunnel is destroyed by the spring floods.

243.

The beaver colony is very organized. How organized are you, when you write this letter all by yourself?

"The beavers work in squads when they are building a' dam. The capital letter $B$ cannot work alone to build' a word.' "It needs other letters.



Baboon n
Bean
Bison :
Bloodhound
Bright:
Buffalo.
Bearer:

Describe how you would build a dam, in the spàce below.




Broccolit:-....-Piter
Broiler.-… Prich.
Zeanute: - - Beel.
Beans. $-\cdots-B_{1}$ Brons.
Bicarlonati,
Pomegranates.
Bativig jodas.
Purintose -


Brownias.
Beverages $\ldots \ldots \ldots \ldots$
Porridge $:-\cdots \cdots$
Bandages $x \ldots$
Bozullons.
Bacon $x \cdots$
Brwe herwes $\ldots \ldots \ldots$
251.

LESSON 40
BEFORE YOU TAKE YOUR NEXT STEP!

eight $-\cdots--\cdots--=$
cine:
Fon $-\cdots-x-\cdots$
frut: - - seond.
Fhiort:- foumth.
fflth,:- - inath.
zeventif:
eighth.
minthr.
Eenth-

$$
\begin{aligned}
& \text { UNIT EIGHT }
\end{aligned}
$$

253...

## Lessen 43

## THE SPIDER AND THE FLY



Spiders do not go to restaurants for lunch. Their food comes to them. When a fly walks on the thin threads of the web, the sticky web holds on to the fly. The fly is unable to get away.

When the spider sees the fly, it rushes over to it and throws many silken threads around the struggling insect. The spider does not stick to the web as it goes round and round the fly. The fly is soon completely covered with the web. It
cannot move.
The spider "does not eat the $f l y$, because it can't. The spider's mouth is too small. and it cannot bite its food off. in chunks nor can it crush its food. The spider's food must be in liquid form: The spider sucks "all the liquids from the fly's body and then gets rid of the fly by cutting the fly's body from the web.


To make a web would be difficult for anyone but a spider. However, it would be difficult for a spider to make the capital letter $s$.

3.

This is how the capital $S$ is witten.
 letter s .

255.

The spider'always" completes its web. You should always complete your letters, top.


Did you know when many spiders are placed together, they eat each other?

256.

But when the capital letter $s$ combine with other letters, - only good things happen.
$\qquad$
tor- - -ad

briaN- Jab.
Th: - - -the:

- Zr:- - - - Slit.
$\qquad$


Tho :.....tmell.
Sh.
Lo: - Sole.
Leg. Shanall
Lt: - Atag:
Zu: :- Jugan.
Zoun....- Larom:
Shy:....-Sypuld:-...

# Epicter <br> Lcorpion:- 

## $\star$

ETharle
Scospion
Sguidt -:
Lhuone
Lhate
Licklo
Ehriew $\qquad$
Lhromp: $\square$


1. The gorilla belongs to the same family as human beings.
(True, False)
2. The gorilla is the biggest species in the family of the" great apes. (True, False)
3. Usually, a gorilla walks on all fours. (True, False)
4. Wild gorillas feed on berries, and leaves. (True, False)


The gorilla is verysshy and will avoidinumans if it can.

The gorilla is less intelligent than chimpanzees. You are more intelligent than a gorilla or a chimpanzee Look at the capital. letter "G".


This is how we write it.
 do you think you can trace the
letter better than these
animals?


Complete this letter.


This capital letter $G$ is a great letter, just like the gorilla is a great ape. Write some capital letter "G's", to

This capital letter $G$ is a great letter just like the gorilla is a great ape. Write some capital G's to show how great you are.





Make each word singular by writing the correct ending for the following words:
Lardenias -



ANOTHER QUICK REVIEN



$\qquad$




## LESSON 44



Who would ever think that a creature called a jelly-fish would be dangerous? Jelly-fish are found in all oceans of the world and they come in all sizes: The common jelly-fish found in North America is about 19 cm . wide. The jelly-fish found in the Arotic measures about 240 cm across its umbrella-like main portion.

A jelly-fish drifts along harmlessly, until a fish brushes by its tentacles. An average size jellyfish has tentacles that trail out or down in the water for 1500 cm .

These tentacles are ready to cause injury or death to anything careless enough to come close to it because these tentacles are made up of poison threads, which. when touched paralyse (inability to move), the fish.

This letter 3 wont harm anybody.

You must be careful to see how it is made.

Complete these. Don't forget. to put a dot over the letter $j$.




## jointer

- 

Suffix:

A syllable that is added to the end of a word to make a new word is called a suffix. Here is a list of words that begin with the letter. Next to the word is a i suffix Write the new word in the space.
$\qquad$

$-11 n n+2+10 \sim$
just $+i c e$

ONE, TWO, THREE, CHARGE!
Porcupines, have long quills, for use as a weapon, against their enemies. Normally, the porcupine is a peaceloving rodent but in an emergency, they can defend themselves easily.

To scare oft an attacker, the porcupine turns its back and raises its quills. If this does not work, the porcupine will rattle the quills.


If both these ideas do not scare off the enemy, the porcupine will run backwards and stab the enemy with its guides.


Stand back and take a closer


Often the North American Indians used the quills of a porcupine to decorate their clothing. decorate the letter $p$ by tracing it.


That was easy, wasn t it? Try finishing these letters.


The Indians took many quills and formed different
 patterns called words.


#  <br> $p N^{-} \times \cdots-\cdots{ }_{x}$ 

prz.-.-gp.
pwn....pon.




prestoccupy prest siippoiri pret text prect vent * a


-     -         -             -                 -                     -                         -                             -                                 -                                     - 

$\qquad$

$\qquad$


$\qquad$
poctsent
ch

281.
-LESSON 46
plants and shrubs.
Below is a list of some plants and shrubs that begin with the letter $j$ or $p$. Practice writing each name and then write the correct name under each picture.

pullDNDAZ, phlow: $\cdots \cdots$ puneapplo.

poppoy.
promzover.
porrinp.


会
e

THE CAPTTAL LETTERS D and L UNIT TEN

WHERE, OH WHERE, HAVE THE DODOS GONE?

In the year 1598, Portuguese sailors crossing the Indian Ocean landed on the island of Maurituis. These sailors soon discovered strange birds living on this island who were larger than a turkey but their tiny wings were useless. These birds could not fly

These birds were easily caught, and killed by these sailors. The name doudo; which means simpleton, was given to these strange birds.
 The English soon called these bixdsdodo.

The killing of these birds continued at such a speed that by 1698 , one hundred years later, there was not one dodo alive. Intact, there is not even a stuffed dodo today. The birds are totally extinct.

The capital letter $D$ is not extinct. It is used all. the time in writing words.

284.

The Portuguese sailors said that these＂doudo＂birds had small wings．The capital letter $D$ has nothing small about it．Look how it is written．


The wings of a dodo bird could never support the weight of this bird．These wings appear to have been a mistake． They should belong to a smaller size bird．

Tracing this letter is no mistake．


This capital letter is easy complete．

285.

You would never be called a dodo, if you tried these

letters.


Did you know that dogs and rats, that came with the settlers to the island also helped kill the dodo bird? Let's never let the capital letter $D$ become extinct.



287 .
FUN WITH SYNONYMS
 same. Here, are two lists of D: Can you match these words with their correct synonym? Write your answer in the space provided, using the capital letter $D$ for each word.



Leeches don't need to drink blood often. When they do, they can eat up to ten times theix own weight. When it drinks that much, it doesn't have to eat for aṇother six months or more.


The capital letter $L$ could never drink blood, at anytime, although it begins the word leech. $\qquad$


莫
In fact, all the capital letter L does is begin words.


Trace this letter without letting
a leech know that you are around.


I wonder how much blood a leech
could drink while you are completing
this letter?


Show the leech who is boss. Write the capital letter L alk by yourself.


As you may know; sometimes more than one leech can be on a swimmer at one time.

$\qquad$
$E \infty . . .-$ Largen
Ex - - Lead.
$Z 0-\cdots-\cdots$. Abraing
Lo . . Lowe
$\mathscr{Z} \omega:-\quad-\quad$ Zucts.
Zy. Styon


An antonym is a word whose meaning is opposite to that of another word. By adding the prefix, dis to the beginning of the word, the meaning of the word is changed to the opposite meaning.

$\qquad$
$\qquad$

$\qquad$
$\qquad$
$\qquad$


A GOOD REVIEW WITH HOMONYMS

$\therefore \Delta \operatorname{con}$

Homonyms are words that sound alike pat pare spelled differently and have different meanings.

- Practice writing each homonym, first with the small letter and second with the capital letter.

dide:- -20.20 .
Ledt-:- Eenct.
- bead. Led.

Lucts:--Leate.
Leab:-LEik.
Loont - Lown - - -
Zone: Lown $\rightarrow \cdots$


- If wous earty mouniño añd the do inos on the ground.
$\qquad$

Etice ivanted to diu her suveater: greein.

Eanvarue tate these lynites from myy fracelet? - -

Et meid ar lande lone.

THE CAPITAL LETTERS; $H, K, M, N, Q, U, V ; W, X, Y, Z$ UNIT ELEVEN

THE FIRST HELICOPTER.


The hummingbird is not only mallest and tiniest of all the smallest and tiniest of all biras but it is also the best flyer, too.

The hummingbird hä̀s beautiful. bright feathers and its wings can move neariy 50 times per second.

In fact, the name hummingbird comes from the sound made by their
 rlaphang wings.

The hunmingbird can fly straight up or straight down. It, can fly backwards, Erontward, or sideways, just like a helicopter.

Hummingbirds build the smallest nests of any bird. There is nothing small about the capital letter $H$ which begins the


The hummingbird's nest is made from lichen (a flowerless, leafless plant that grows on rocks), moss and. spiders' webs. The capital letter H is made from different curves and strokes, also.


The hummingbirds are expert nest builders. Trace and complete these letters. They will help you to become an expert letter maker. Practice makes perfect!


0
To be a good flyer like the hummingbird, it takes a lot of skill: Show your handwriting skill by writing the capital letter $H$ in the space.

The hummingbirds needs lichen, moss and spiders' webs to build the nest. Here are some letters that the letter $\cdot \mathrm{H}$ needs to build words: a, e, $1,0, a, y$.

Practice writing the letter combinations in the spaces. Write a word that begins with these two letters at the end of each line.


Here are some interesting facts about the hummingbird. Rewrite these statements in an interesting paragraph. Don't Forget to give the paragraph an interesting title.

1. The hummingbird is an expert flyer.
2. When ito finds a honeysuckle flower it "stands still" in the air.
3. Then the bird's long bill touches the outside of the flower's center.
4. The hummingbird moves forward slowly until the bill is completely inside the flower:
5. The hummingbird drinks the nectar.
6.. The hummingbird flies backwards to remove its bill from the flower and flies to another flower.


-     -         -             -                 -                     -                         -                             -                                 -                                     -                                         -                                             -                                                 -                                                     -                                                         -                                                             -                                                                 -                                                                     -                                                                         -                                                                             -                                                                                 -                                                                                     -                                                                                         -                                                                                             - 

$\square$



$\qquad$
ーー - - - - - - - - - - - - - - - - - - - - - - -

## LESSON 50

THE KIWI, AN UNUSUAL BIRD


The kiwi is a very unusual bird. It $\quad$ ives in New zealand. In fact, it is the national bird of New Zealand.

Unlike other birds, who depend on their sight to find food, the kiwi depends on its nose. They have very sensitive nostrils which sniff out worms, grubs and insects in the soft ground.

The capital letter $K$ is not an unusual letter. It is made similar to the printed capital K.


I'he Kiwi bird is, very shy and stays in the forests of New zealand. I hope you aren!t shy as you look carefully at this letter.


The time needed to hatch an egg, called: the incubation period, usually takes about 11 days. The incubation period for the Kiwi is about 80 days. It certainly won't take 80 days for you to do
 the next three exercises.


Even though the Kiwi is no larger than a chicken, the Kiwi lays an egg which is larger for its size than any other bird. Laying an egg doesn't take any practice but writing neat letters and words certainly does. hook in your dictionary for help to write' in a word if you canst remember any" word that begins with these letters.

## 0



Complete this story and draw a picture in the box.
One bright summer's day, Kangaroo who'lived far away in Australia, decided that he would hop on a plane and visit his pen-pal, Kiwi. Now, Kiwi lived in a neighbouring country and he also decided that he would hop on alane and visit his pen-pal, kangaroo. As both planes passed one another in the pale blue sky

$\square$

## LESSON 51

## THE SHAPE CHANGERS

Most oreatures always have the same shape. But some change their shape and way of life as they grow.

Butterflies are insects : which changes their shape as


When a butterfly egg hatches, a caterpillar which is a furry worm like insect, comes out. This caterpillar eats, and eats, and eats. It grows very big and then it attaches itself to a twig, and grows a hard skin. The caterpillar is now called a chrysalis (kris-uh-lis).

For many weeks this chrysalis looks very still. However, many changes are happening on the inside, very slowly, When spring arrives, this hard covering splits open and a new looking insect steps out. This insect has four wings, six legs, feelers, and new eyes. The new insect is called a butterfiy.
307.

The butterfly must dry its wings beftre flios away: When the capital letter $M$ is written,


Metamorphosis happens quite often in nature. Mosquitos. and moths are other good examples. To begin a sentence with any of these $m$ words, you must change the small letter $m$ to the capital M .


Complete the change of this letter.


The metamorphosis stages take time. Take your time

moth
THar..........Plast.
THe:- THET.
Hi:- - FTEAS:
Who ..........plow.

THy: .-. Thy

How many words can you write that begin with the prefix mis? Can you write at least ten without any help?

$\qquad$
$\qquad$


$\qquad$

 | $\vdots \quad \therefore \quad \because \because \cdot$ |
| :--- | - - - - - - - - - - - - - - - - - - - - - $\because \because \ddots \quad \ddots \quad$ 多

$\qquad$

$\qquad$
$\qquad$

[^0]MUSIC LESSONS.


To teach nightingales to sing, breeders separate the young ones from the parents. These male nightingales are isolated from each other in cages. The young nightingales are then only allowed to listen to an adult male sing. This adult male sings perfectly.

The young birds who only"listen to this perfect singing, soon copy the songs and become perfect singers, too,

If you want to be a great handwriter, you must be like the nightingales. You must copy:


The capital letter $N$ is much easier to write than the capital letter M.


The letter $N$ is faster to write beçase it on $\frac{\text { f }}{}$ nas one hump. Practice tracing this letter quickly but carefully.


Don't look, yourself in your classroom when you complete these letters.


Even though young nightingales are only allowed to listen to an adult sing, you certainly are allowed to write the capital letter $N$ :

$\qquad$



Do you remember that a syllable that is added to the end of a word to make a new word is called a suffix?

Add the suffix ly to each of the following words; then complete the sentence by writing the new word in the space.


Plormats tyy $\cdots \cdots$
 Fo the movies
,--, the boy enter ed i the dare room. The young toy played the plano.
$\qquad$ friends came To help the sick farmers:-- - never lister? to horror stories.

PARDQN ME, BUT MAY I USE YOUR QUILLL?

For hundreds of years, men used a quill, to write with ink- "The tip of the quill was: sharpened to a fine polnt. The sharper the point, the thinner the lines. The wider the quill the wider the lines.

When a guill was dipped into the ink, a little ink stayed in. the hollowed-out undersurface of the point.

When the quill touched the paper, the ink flowed from this storage space, through the narrow slit, to the tip and onto the paper.

This type of pen didn't hold much ink and had to be dipped frequently.
b

Do you know that all words that begin with the letter a all have the letter $u$ as the second letter? It's true!


The capital letter $q$ is very similar to the number two. ". It is very easy to write. Take your quill, and dip it into your ink after you see how this letter is written.


Is your quill ready? Start tracing this letter.


I hope u will not forget to complete this letter !

318.

Now pluck another feather from a passing bird, sharpen the end, dip it into the ink, and start writing:


How many words can use the word guart as the root word? Write your list on the lines below.


Here is an alphabet verse that you may enjoy writing. Quincy Quail quickly quacked, for a quaint quarter.
$\qquad$

 | $\square$ | $\ddots$ | $\ddots$ | $\ddots$ |
| :--- | :--- | :--- | :--- |

 - - - - - - - - -


LESSON 54

## WHY THE BEAR'WADDLES?

Many years ago, before the
black bear was called Ursusamericans, by the scientific white, man, the Indians told a story about the bear.

Now it seemed that the bear was very fond of fishing. It fished continuously for days at a time, until ne ate his full. After a few days: he would return again to fish.

One day, while fishing under the hot sun, he decided to tie his Fishing line around the nearest tree and take a nap.


It just so happened that he tied the line near a busy hornet's nest. The black bear unaware of the nest, took off his, shoes, stretched his arms high over head, and rested. in the tall cool grass.

When he had stretched, his strong paws clumsily hit the well hidden hornet's nest. " This angered the hornets.

322 :
As they left the nest; the sight of a line attached to theix favourite tree annoyed them even more.

They dove angerly at the massive sleeping bear. "Ouch-ouch-ouch", aried the bear as he jumped to his feet. Within a wink of an eye, he.grabbed his shoes.

However, in his haste, he put hiss moccasins on the wrong feet and waddled quickly away.

From that day onwaxd, the black bear has always been seen waddling through the forest.

The black bear. comes in many colors - cinnamon, black, dark brown and black with a patch of white. The capital U only comes in one style similar to the printed letter $u$.


If you travel to some of America'.s national parks, these black bears can often be seen begging for handouts. This Ursus americanus can also be seen stealing food from tourists.

Here is this letter. :The black bear doesn't know it is not edible.


These friendly bears also have a quick temper. You must be very careful when these bears are around. Keep busy and trace this letter.


In areas where the black bear does not see human beings very often; the black bear is quite shy.


The black' bear has a keen sense of hearing and smell but he has very poor eyesight.

$9$


Consonant letters have been left out of the answers in the clues at the bottom of the page. Write the letters in the blanks; then write the words in the correct spaces in the puzzle.

## ACROSS

1. something, a bear likes.to eati. o ey.
2. you are light but the bear is ea_y.
3. what bear did to the line ie...
4. sometimes he waddles to the beaver's $\qquad$
$\qquad$ .
5. a. large star in the sky $\qquad$ .

DOWN

1. insects that stung the bear $\mathrm{O}^{\mathrm{o}}$ _ e _ .
2. where your eyes are ea.

3: a place where hornets live $\qquad$
$\qquad$ .
4. a bear does not sleep on one _e. e.
5. short for evening $\qquad$


## LOOKS ARE DBCEIVING!



The Venus's flytrap is one plant that insects can do without.

When an unsuspecting insect walks on the surface, the leaf: will suddeniy snap shut.

A Venus's flytrap cannot be fooled. If small twigs or pebbles fall on the leaf, nothing happens.

The leaf has three sensitive hairs on each leaf half. The leaf will not close unless two.
hairs are touched, one after another or the same hair twice.

Once shut, the trap gradually pinches tighter and tighter, squeezing jts 'prey against' the digestive glands on the leaf's surface.
329.

The Venus's flytrap does not look harmful to crawling insects. Ants especially show no fear of the plant; until it is too late. Unlike the Venus's flytrap, the capital letter $\dot{\forall}$ is harmless, in every way.




We venus's flytrap plant is a very complicated plant to understand. How does it know not to close its leaves on a pebble or twig?


Don't get taught not knowing how to complete this letter.


The total insect s usually absorbed in a week by the Venus "s flytrap. After this time the leaf reopens, ready for other insect victims / While the plant is absorbing an insect that you don particularly like write some capital letter


Take your time as you practice these
letters. If you hurry, the venus's
flytrap may hurry too and get indigestion.

 Here are two rules to remember:

1. When one consonant stands between two
vowels in a word;
the consonant
usually begins the next
syllable.
2. When two consonants
come together in $a$


## LESSON 56

## MAYDAY, MAYDAY!

Animals, fish, birds, and insects send signals to each other for many reasons. Rabbits thump their feet to warn other rabbits of danger. $\because$ Robins sing certain notes to warn other birds to stay away from their territory. Migrating birds call to each other at night to warn each other of danger or to keep ge flock together.


The word WARNING is very important. It begins with the capital letter $W$.


There are many times that we see this word written on signs, bottles and cans. It is important to know how to write this letter.


The word Warning should be written on all containers, which have things inside that could be harmful to animals and humans. Trace this letter


There are some chemicals in containers that could burn "if it comes in contact with human or animal skin.


Write the capital letter in this space. It is important to wfite this letter carefully so that adults and children can read this letter.


Some containers which have waining written on them have saved countless lives.

## Practice writing the word Warning in the spaces below.

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$6] 7^{2}-\cdots \quad$.


Look through your parent's kitchen cupboards at home. Make a list of all the cans fond bottles that have Warning written on them.


Look in the medicine cabinet at home. How many things can you find that have Warning on them? Write your list on the spaces below.


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## LESSON 57

BLAST OFF TO THE MYSTERIOUS PLANET X
You have just landed on the planet $X$. Strange creatures are approaching your space craft. They are in the shape of the capital letter x .

1. What do these creatures look like? Describe them.

2. How did they talk to you? How did they talk to each other?
$\square$
3. Did they do anything strange that you noticed?


The capital letter $X$ is an odd looking letter, but it. can be fun to write.


Trace this strange looking letter.


On this mysterious planet the capital. $X$ is. written everywhere. Some of these creatures are busy writing these letters on signs. Help complete these letters for your new friends.


The letter $X$ is a letter that is not used very much. But that's O.K. It's exciting to write'this letter, anyway.


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$2-R-1-\cdots$
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## LESSON: 58

Yaks eat grasses and herbs. They also nibble on the leaves of small shrubs. Like cows they do not chew their food thoroughly before swallowing. After eating, they bring up wads of partly aigestéd food, called cuds. These animals chew the louds further, then swallow and digest them.

If you were a yak, would you enjoy eating grass, herbs and leaves? Of course you would! If you were a yak and you were attending school, you would enjoy writing the letter $y_{\text {, }}$ because your name begins with this letter.


The capital letter $Y$ is made almost like the small letter y, only larger.


Bring back your memory of the small letter y. "Chew" on this idea for awhile.

Now that you have sunk your teeth into this letter,

$\qquad$
a

What kind of vegetables do you eat with your meals? The Yak doesn't have much variety, does it?. Add some letters to the letter $f$ for variety.

347.

Write four sentences that, begin with the letter $Y$, and are about a Yak. You will have to find some information about a Yak in a reference book. Write your sentences clearly. Read them to the class.


Do you haye any idea what this name means? By looking at the picture for a clue You can guess that this is the scientific name for the seal.

If you have ever seen seals perform you will know that seals can obey human's

verbal commands. They can march like solóaers, play short : musical tunes on musical instruments, balance colorful beach * balls on their noses, and even play catch.

These performers, who love to show off their talents are one of the most intelligent and trainable mamalis:

349.

The letter 2 is as tricky to write as seals are clever.




## $/$

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352. 

LESSON $60^{\circ}$


In most types of sharks the mouth is beneath the snout, well. back, in the head. Sharks usually attack from below, angling the snout upward and"over its dinner.

Unlike the teeth of humans, who have their teeth held to their jaws by roots, the shark's teeth are embedded in the gums, ; forming four to six rows of razor-sharp"teeth.

The front row has the largest teeth. They fall out after they are used and are replaced by the next tooth behind it.

In a lifetime, a shark may lose over 10,000 teeth.
Although a shark rarely uses its jaws to attack a person. it will attack much larger sea animals. The word jaw begins with the letter J. "his is how we wite the capital $J$.


The sharks never run out


of teeth. Don't let yourself run out of the letter $J$. Trace these letters.




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