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INSTITUTION Mesa County Valley School District 51, Grand Junction, Colo.

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EDRS PRICE MF-\$0.83 Plus Postage. HC Not Available from EDRS. DESCRIPTORS \*Behavioral Objectives; Business Education; Communication Skills; Developmental Reading; \*Educationally Disadvantaged; \*Individualized Instruction; Language Arts; Manuals; Practical Mathematics; Remedial Reading; Science Units; \*Secondary Education; Social Studies Units; Teacher Developed Materials; \*Units of Study (Subject Fields)

ABSTRACT

Planned for use in an individualized instructional program, the manual contains behavioral objectives for each of five subject areas: commercial (business education), communications (language arts), math, science, and social studies, plus a program in remedial and developmental reading. Arranged by color coded sections, the subject areas are subdivided into specific topics. For example, the social studies units cover American history, American government, civics, economics, general psychology, advanced psychology, and ethnic studies. Written by teachers, the behavioral objectives sometimes relate to texts or instructional packages not identified in the document, as the manual was developed for use in a specific secondary school program for the educationally disadvantaged. (RG)

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# PROJECT R-5

An

Occupational Work Experience Program

For

Disadvantaged Secondary Youth

School Drop-Outs

And

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Potential Drop-Outs



U.S. DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
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## INTRODUCTION

The academic preparation of R-5 Students centers around the five core areas of Communications, Math, Science, Social Studies and Business, plus a program in Remedial and Developmental Reading. The instruction at R-5 is individualized so that each student may progress at his own rate. Thus, a student may enroll in the school at any time during the year without disrupting classroom routine or being penalized by the traditional semester system. Consequently, a student could finish a course in less than the nine month period, if he has worked diligently. Conversely, he may have difficulty learning concepts in another area, and he might spend more than nine months in that troublesome subject.

The objectives contained in this manual are a revision of the previous manual. Revision is an on-going process and work has already started on our next set of objectives.

The teachers responsible for the submitted objectives are:

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Math.....	Dan Peterson
Reading.....	Wayne Zimmerman
Science.....	Harriett Real
Social Studies.....	Heidi Hizel

J. A. Roscoe  
Principal

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## DEFINITIONS

### INDIVIDUALIZED--

permits student to work independently and at his own rate and depth.

### INDIVIDUALIZED INSTRUCTION--

an instructional system in which the characteristics of "each" student play a major part in the selection of and participation of the following:

OBJECTIVES  
MATERIALS & MEDIA  
PROCEDURE  
TIME

### SELF-INSTRUCTION--

any learning activity designed in such a way that the student assumes the major responsibility for his own instruction.

### PROGRAMMED INSTRUCTION--

Instruction through information given in small steps with each step requiring a correct response by learner before going on to the next step.

### CONTINUOUS PROGRESS--

a type of school year which allows the student to enter at any point going in 1/4 steps although not necessarily at quarter and semester deadlines.

### PRE-TEST--

Evaluation tool used to diagnose the student's level of competency before he begins a segment of instruction.

### POST-TEST--

Evaluation tool used to determine whether or not the student has reached the prescribed level of competency.

TABLE OF CONTENTS:

INTRODUCTION

DEFINITIONS

BEHAVIORAL OBJECTIVES FOR:

	<u>Page</u>
I. <u>COMMERCIAL</u> (Pink Section)	
Office Practice	1
General Business	4
Bookkeeping	6
Typing I	7
Typing II	8
Typing III	9
Cash Register	11
II. <u>COMMUNICATIONS</u> (White Section)	
Advanced Composition	13
Basic Composition	17
E.D.L.	18
Man and His Modes	22
Mass Media	26
Oral Communications	28
Reading Skills	31
Spelling	32
Vocabulary	33
Vocational Communications	35
III. <u>MATHEMATICS</u> (Yellow Section)	
Consumer Math	37
Math II	40
Math I	42
Slide Rule	45
IV. <u>READING</u> (White Section)	
Introduction	47
Objectives	50

V. SCIENCE(Vocational) (Green Section)

Earth Science	54
Chemistry	56
Physics	58
Biology	60
Applied Physics	65
Modern Physical Science	68
Earth: Its Changing Form	71
Earth: Its Living Things	74
The Physical World	77
Health & Safety	82
Zoology	86
Man in Space	88
Man and the Ocean	89

VI. SOCIAL STUDIES . (Blue Section)

American History	90
American Government	91
Civics	92
Economics (Vocational)	93
General Psychology	94
Advanced Psychology	95
Ethnic Studies	96

## BEHAVIORIAL OBJECTIVES--OFFICE PRACTICE

## 1.0 REMEDIAL

- 1.1 The student will be able to control the proper keys on the keyboard with the proper finger without looking at said keys.
- 1.2 The student will be able to type in proper style a modified block letter.
- 1.3 The student will be able to type in proper style a block letter.
- 1.4 The student will be able to figure and set margins for at least four different length lines.

## 2.0 ADDING AND CALCULATING MACHINES

- 2.1 The student will be able to add 20 sets of 7 numbers 8 out of 10 times.
- 2.2 The student will be able to subtract 8 digit numbers 8 out of 10 times.
- 2.3 The student will know and use two different ways to multiply on the 10 key adding machine.
- 2.4 The student will be able to divide by the reciprocal method 8 out of 10 problems.
- 2.5 The student will be able to pro-rate by use of the 10 key adding machine 8 out of 10 problems.
- 2.6 The student will be able to figure discounts and net amounts on the calculator 2 out of 3 times.
- 2.7 The student will be able to subtract using the electronic calculator 8 out of 10 times.
- 2.8 The student will be able to extend invoices using the calculator 2 out of 3 times.
- 2.9 The student will be able to multiply using the electronic calculator 8 out of 10 times.
- 2.10 The student will be able to figure a chain discount on the calculator 8 out of 10 times.
- 2.11 The student will be able to divide using the electronic calculator 8 out of 10 times.
- 2.12 The student will be able to use a constant multiplier 2 out of 3 times using the calculator.

2.13 The student will be able to do 5 digit number problems with a credit balance involved in 3 out of 5 times.

2.14 The student will be able to figure percentage of increase and decrease in 3 out of 5 problems.

2.15 The student will be able to reconcile a simple bank statement.

### 3.0 TYPING

3.1 The student will be able to figure and type an eight column tabulated problem with at least 20 lines on various material.

3.2 The student will be able to type a block letter with a maximum of 1 uncorrected error.

3.3 The student will be able to type a satisfactory N.O.M.A. letter with a maximum of 1 uncorrected error.

3.4 The student will be able to type a modified block letter with a maximum of 1 uncorrected error.

3.5 The student will be able to type a satisfactory inverted letter with a maximum of 1 uncorrected error.

3.6 The student will be able to type a letter containing tabulated material with a maximum of 1 uncorrected error.

3.7 The student will be able to type a satisfactory indented letter with a maximum of 1 uncorrected error.

3.8 The student will be able to identify and use open and mixed punctuation in 9 out of 10 times.

3.9 The student will be able to assemble a carbon pack correctly.

3.10 The student will be able to type a letter with a subject and attention line 3 out of 4 times.

### 4.0 DUPLICATING

4.1 The student will be able to prepare and correct at least 4 stencils.

4.2 The student will be able to prepare and correct at least 4 masters.

4.3 The student will be able to run a master on the mimeograph and produce several satisfactory copies.

4.4 The student will be able to use at least 4 different styli correctly.

4.5 The student will be able to run a master on the ditto machine and produce several satisfactory copies.



## 5.0 TRANSCRIBING

- 5.1 The student will be able to transcribe 3 satisfactory block letters from tapes.
- 5.2 The student will be able to transcribe 3 satisfactory modified block letters from tapes.
- 5.3 The student will be able to transcribe 3 letters from a style other than the above.

## 6.0 FILING

- 6.1 The student will type or understand the 30 filing rules in the book Business Filing and Record Control.
- 6.2 The student will file 50 cards dealing with the name of individuals, with at least 70% accuracy.
- 6.3 The student will file 50 cards, dealing with business names, with at least 70% accuracy.
- 6.4 The student will file 50 cards, dealing with special names, with at least 70% accuracy.

## 7.0 CASH REGISTER

- 7.1 The student will be able to demonstrate knowledge of the home keys on the cash register.
- 7.2 The student will be able to demonstrate knowledge of the proper control of the department keys.
- 7.3 The student will be able to demonstrate the proper way to unlock, clear, and read the cash register.
- 7.4 The student will be able to set the correct date on the machine.
- 7.5 The student will be familiar with the proper arrangement of the money drawer.
- 7.6 The student will be familiar with the methods of correcting errors.

## BEHAVIORAL OBJECTIVES--GENERAL BUSINESS

## 1.0 BANKING SERVICES

- 1.1 Given a list of 25 banking terms the student will correctly identify 20 of them.
- 1.2 The student will correctly fill out a simulated check and stub.
- 1.3 The student will correctly fill out a simulated deposit slip.
- 1.4 The student will correctly write four simulated endorsements.
- 1.5 The student will identify 4 of 5 special checks.

## 2.0 SPENDING

- 2.1 Given a list of 25 financial terms dealing with spending, the student will identify 20 correctly.
- 2.2 The student will set up a weekly spending plan.
- 2.3 The student will set up an Income and Expense record.
- 2.4 The student will set up a comparison of savings and expenses with budget allowance.

## 3.0 CREDIT

- 3.1 Given a list of 25 credit terms the student will be able to identify 20 correctly.
- 3.2 The student will be able to figure interest by two different methods.
- 3.3 The student will be able to fill out a simulated conditional sale contract.

## 4.0 INSURANCE

- 4.1 Given a list of 25 insurance terms the student will correctly identify 20.
- 4.2 The student will fill out a simulated application for a social security card.
- 4.3 The student will be able to figure the premiums of at least 3 types of insurance from a simulated chart.

## 5.0 SAVINGS

- 5.1 Given a list of 25 savings terms the student will be able to correctly identify 20.

## 6.0 TRAVEL

- 6.1 Given a list of 25 travel terms the student will correctly identify 20.
- 6.2 The student will be able to read a time table correctly at least 4 out of 5 times.

## 7.0 COMMUNICATIONS

- 7.1 Given a list of 25 communication terms the student will correctly identify 20.
- 7.2 The student will be able to identify the parts of a letter.
- 7.3 The student will be able to figure the shipping charges of at least 4 different weight packages from a simulated zone rate chart.

## 8.0 FILING

- 8.1 Given a list of 25 filing terms the student will correctly identify 20
- 8.2 The student will be able to file 25 cards in the correct order.
- 8.3 The student will be able to show four different ways to file the same cards.

## 9.0 EMPLOYMENT

- 9.1 Given a list of 15 terms on employment and correctly identify 10.
- 9.2 The student will correctly fill out a simulated application form.
- 9.3 The student will make a personal data sheet.

## BEHAVIORIAL OBJECTIVES

## 1.0 BOOKKEEPING

- 1.1 The student will be able to make a satisfactory balance sheet.
- 1.2 The student will be able to record a balance sheet in a general journal.
- 1.3 The student will be able to post an opening entry to a ledger from a general journal.
- 1.4 The student will be able to journalize entries that affect the balance sheet accounts.
- 1.5 The student will be able to journalize entries that affect the income and expense accounts.
- 1.6 The student will be able to take a trial balance.
- 1.7 The student will be able to make a worksheet with adjustments.
- 1.8 The student will be able to make an income and expense statement.
- 1.9 The student will be able to tell which journal each entry should be entered in.
- 1.10 The student will be able to reconcile a simple bank statement.
- 1.11 The student will be able to make adjusting entries.
- 1.12 The student will be able to make closing entries.

## BEHAVIORAL OBJECTIVES-TYPING I

## 1.0 PARTS OF THE TYPEWRITER

1.1 The student will be able to name 25 of most vital parts of the machine.

## 2.0 MARGIN STOPS

2.1 The student will be able to figure and set the margins for the 4 most common length lines.

## 3.0 POSTURE

3.1 The student will know and be able to use the correct typing posture when typing.

## 4.0 KEYBOARD

4.1 The student will know and use the correct finger to control a specific set of keys.

4.2 The student will know how to return the carriage correctly.

4.3 The number keys will be controlled, by the student, with the correct finger.

## 5.0 LETTERS

5.1 The student will be able to identify and use correctly the various parts of a business letter.

5.2 The student will know how to place the various parts of the business letter at their assigned places.

5.3 The student will be able to type a satisfactory block letter.

5.4 The student will be able to type a satisfactory modified block letter.

## 6.0 TABULATION

6.1 The student will be able to figure and type a simple 3 column tabulated problem.

6.2 The student will be able to figure and center any number of items using the backspacer from center method.

6.3 The student will be able to center a 20 line item vertically on both a full and a half sheet of paper.

## BEHAVIORIAL OBJECTIVES-TYPING II

## 1.0 KEYBOARD

- 1.1 The student will have complete mastery of the keyboard using the proper finger to control the proper key.
- 1.2 The student will be able to use the extra keys with the proper finger.

## 2.0 TABULATION

- 2.1 The student will be able to figure and set up at least two 8 column, 20 line problems.
- 2.2 The student will be able to center vertically any number of problems. The only requirement being that they fit into the space allotted.

## 3.0 LETTERS

- 3.1 The student will be able to type a block letter with a maximum of 3 errors on the whole letter.
- 3.2 The student will be able to type two modifications of a modified block letter with no more than 3 errors.

## 4.0 MANUSCRIPTS

- 4.1 The student will be able to type a 2 page manuscript with footnotes and be able to figure margins for the same.

## 5.0 MISCELLANECUS

- 5.1 The student will be able to type a senders copy of a telegram.
- 5.2 The student will be able to name 18 out of 20 parts as indicated on the typewriter.
- 5.3 The student will be able to fold both a large letter and a small one for placing in an envelope.

## BEHAVIORAL OBJECTIVES--TYPING III

## 1.0 PARTS OF THE TYPEWRITER

- 1.1 The student will be able to name 25 of the most vital parts of the machine.
- 1.2 The student will be able to identify these 25 parts.

## 2.0 KEYBOARD

- 2.1 The student will be able to know and use all the regular keys with the proper key controlled by the proper finger.
- 2.2 The student will be able to control the special keys with the proper finger.

## 3.0 TABULATION

- 3.1 The student will be able to figure and set up at least two 6 column, multi heading, 20 line problems.
- 3.2 The student will be able to center vertically at least five problems.
- 3.3 The student will be able to put at least five problems in reading position.

## 4.0 LETTERS

- 4.1 The student will be able to write a block letter with a maximum of 1 uncorrected error.
- 4.2 The student will be able to write a modified block letter with a maximum of one uncorrected error.
- 4.3 The student will be able to write a N.O.M.A. letter with a maximum of 1 uncorrected error.
- 4.4 The student will be able to write a satisfactory letter with tabulated material in context, with no more than 1 uncorrected error.

## 5.0 MANUSCRIPTS

- 5.1 The student will be able to type a simple one page manuscript.
- 5.2 The student will be able to type a two page manuscript.
- 5.3 The student will be able to type a manuscript with footnotes.
- 5.4 The student will be able to figure margins for a manuscript bound on the left or top.

6.0 TIMED WRITINGS

- 6.1 The student will be able to type for 5 minutes with a maximum of 4 errors.

7.0 MISCELLANEOUS

7.1 The student will be able to make one or more carbon copies.

7.2 The student will be able to type a senders copy of a telegram.

7.3 The student will be able to type envelopes, both large and small.

7.4 The student will be able to fold 8 1/2 x 11 paper to fit envelopes, both large and small.

7.5 The student will be able to type a satisfactory interoffice memorandum with a maximum of 1 error.

7.6 The student will be able to type an interoffice memorandum with tabulated material with a maximum of 1 error.



## BEHAVIORAL OBJECTIVES--CASH REGISTER

## 1.0 HOME KEYS

- 1.1 The student will know and be able to control the keys controlled by the thumb.
- 1.2 The student will know and be able to control the keys controlled by the index finger.
- 1.3 The student will know and be able to control the keys controlled by the second finger.
- 1.4 The student will know and be able to control the key controlled by the third finger.
- 1.5 The student will know and be able to control the key controlled by the little finger.

## 2.0 DEPARTMENT SELECTION

- 2.1 The student will know the correct procedure to control the department keys.

## 3.0 UNLOCKING, CLEARING, AND READING

- 3.1 The student will be able to lock and unlock the machine with the proper key.
- 3.2 The student will be able to read the machine by using the correct procedure.
- 3.3 The student will be able to clear the machine by using the correct procedure.

## 4.0 DATE SECTION

- 4.1 The student will be able to set the last day section of the date wheel.
- 4.2 The student will be able to set the first day section of the date wheel.
- 4.3 The student will be able to set the month section of the date wheel.

## 5.0 DETAILED AUDIT SLIP

- 5.1 The student will be able to read the detailed audit slip at least twice.
- 5.2 The student will be able to change the detailed audit slip at least once.

6.0 CUSTOMER RECEIPT TAPE

6.1 The student will be able to read the customer receipt tape at least 3 times correctly.

6.2 The student will be able to change the customer receipt tape at least once correctly.

7.0 SETTING UP MONEY DRAWER

7.1 The student will be able to set up money drawer at least 2 times.

8.0 MAKING CHANGE

8.1 The student will be able to count back change on two simulated cash sales.

9.0 CORRECTING ERRORS

9.1 The student will be able to correct errors made in department selection.

9.2 The student will be able to correct an over-ring at least 2 times.

9.3 The student will be able to correct an under-ring at least 2 times.

## Advanced Composition

## 1.0 20 Steps to Better Composition

- 1.1 The student will write a given number of unified and grammatically correct sentences.
- 1.2 The student will write a given number of sentences correctly using figures of speech.
- 1.3 The student will rewrite a given number of sentences eliminating wordiness, clichés and jargon.
- 1.4 The student will write a given number of paragraphs containing topic sentences and supporting ideas.
- 1.5 The student will recognize and use connotative words in a given number of sentences.
- 1.6 The student will use a given number of words in a variety of contexts thus indicating various meanings for the same word.
- 1.7 The student will write a given number of simple outlines.
- 1.8 The student will compose a given number of effective beginnings and endings for compositions.
- 1.9 The student will compose a given number of informal and formal letters using the correct formats.
- 1.10 The student will recognize the differences between a given number of formal and informal essays and reports.
- 1.11 The student will rewrite a given number of paragraphs correctly utilizing coordinating and subordinating conjunctions.
- 1.12 The student will compose a given number of conversations correctly employing punctuation and form for the use of dialogue.

## 2.0 You Can Write

- 2.1 The student will compose a given number of grammatically correct word games such as Tom Swifties.
- 2.2 The student will write a grammatically correct advertisement, set of rules, simple description and proposed solution for a problem.
- 2.3 The student will write a grammatically correct paragraph(s) emphasizing word choice to indicate his meaning.
- 2.4 The student will write a given number of grammatically correct paragraph(s) with the emphasis on description, action, emotion definition, characterization, observation, comparison, contrast, argument, or cause and effect.

2.5 The student will write a grammatically correct opening paragraph for a story.

2.6 The student will write a grammatically correct paragraph(s) using a saying as the focal point.

2.7 The student will differentiate between a creative composition and an expository composition and will write one of each in a grammatically correct manner.

### 3.0 Stories You Can Finish and Picture Your Writing

3.1 The student will write the endings for a given number of incomplete stories employing correct grammar, use of dialogue and plot development techniques.

3.2 The student will write a given number of grammatically correct paragraphs emphasizing the selection of the best details to satisfy his intent or purpose.

3.3 The student will write a given number of grammatically correct paragraphs based on his reporting from observation.

3.4 The student will write a given number of grammatically correct paragraphs using comparison as the major purpose.

3.5 The student will write a given number of grammatically correct paragraphs emphasizing character development through description and dialogue.

## 4.0 STOP, LOOK &amp; WRITE,

- 4.1 Given the photo-text, the student will take the pre-test, "Effectiveness as a Writer" and save it for personal evaluation & comparison at the completion of this course.
- 4.2 Given the 20 photo-sections covering techniques in imaginative observation & writing, the student will complete all the sections & corresponding questions to the best of his ability & creativity in an essay format, specifically referring to the pages & pictures.
- 4.3 Given the One Final Exercise (Post-Test), the student will summarize & evaluate his own progress together with his student-teacher consultations & progress sheets.
- 4.4 Given the 20 various techniques covered, the student will choose his favorite elements & photos and complete a personal evaluation of his experience with the photo-text in an essay to his & his teacher's satisfaction and using the techniques discovered.
- 4.5 Given any of the 20 techniques, the student will be able to correctly define and give an example of 10 of them.

## 5.0 THE WRITERS EYE

- 5.1 Given the photo-text, the student will take the pre-test, "Effectiveness as a Writer" and the text pre-test, saving these for personal evaluation & comparison at the completion of this course.
- 5.2 Given the 20 photo-themes, which are broken down into Man and His Own Nature, Other People, The Impersonal Environment, and the Intangibles, the student will complete all corresponding questions over the sub-themes to the best of his ability & creativity in an essay format, specifically referring to the titles of the photos &/or sub-sections.
- 5.3 Given the Post-test, the student will summarize & evaluate his own progress together with his student-teacher consultation and progress sheets.
- 5.4 Given the 4 main parts of the 20 photo-themes, the student will choose his favorite theme and compare or contrast it to his least favorite to his & his teacher's satisfaction.
- 5.5 Given any of the 4 main themes & parts, the student will be able to universalize or synthesize the essential elements of 2 of these in an essay format to be subjectively graded & averaged with his other assignments & per his individualized approach.

## 6.0 SINGER/SLIDEAS

- 6.1 Given the Singer/Slideas 3-M Projection themes: **FACES & FEELINGS, METROPOLIS, SEARCHING, SEASONS, & SHARING**, the student will view all 20 slides per each theme.
- 6.2 Given a list heading for Title, Environment, & Occupation, the student will write a suggested idea or name for each of the 20 slides & 3 headings.
- 6.3 Given a list heading for Feelings, Descriptions, and Antonyms, the student will write 1 idea for each of the 20 slides & 3 headings.
- 6.4 Given each theme & its corresponding 20 slides, the student will re-arrange mentally & by title the set into a logical, cause-effect, time, thematic, story pattern or other order and explain why.
- 6.5 Given a favorite slide from a favorite theme, the student will write a short poem, story, essay or other work such as a sequel, diary, collage, poster or universal themes to his and his teacher's satisfaction.
- 6.6 Given a particular theme, the student will write about the total theme in terms of what it **SYMBOLIZES** to him & why, being specific about the particular pictures which best represent this "idea beyond" with a least 2 written pages.
- 6.7 Given a particular theme, the student will summarize and synthesize its contents with at least 2 written pages.
- 6.8 Given all the above in-depth practices with each theme & its corresponding 20 slides, after viewing all slides, for practice in recall, the student will write, draw, or list as many details about the series of pictures as he can remember.

## Basic Composition

## 1.0 Practice in English and Sentence Improvement

- 1.1 The student will identify with 70% accuracy the subjects and predicates in a given number of sentences.
- 1.2 The student will identify with 70% accuracy complete sentences from a given list of complete and incomplete sentences.
- 1.3 The student will use with 70% accuracy the proper punctuation and capitalization in a given number of sentences and phrases.
- 1.4 The student will use with 70% accuracy the correct form of the verb in a given number of sentences.
- 1.5 The student will use with 70% accuracy the correct pronouns in a given number of sentences.
- 1.6 The student will correct with 70% accuracy the errors in agreement of verb with subject and of pronoun and antecedent in a given number of sentences.
- 1.7 The student will correct with 70% accuracy the errors in use of adjectives, adverbs, case and various troublesome words and expressions in a given number of sentences.
- 1.8 The student will write with 70% accuracy a given number of sentences demonstrating sentence patterns containing transitive verbs, intransitive verbs, linking verbs and the verb be.
- 1.9 The student will write with 70% accuracy a given number of sentences containing prepositional, participial, gerund and infinitive phrases and appositives.
- 1.10 The student will write with 70% accuracy a given number of sentences demonstrating the use of modifiers.
- 1.11 The student will write with 70% accuracy a given number of declarative, interrogative, imperative and exclamatory sentences.
- 1.12 The student will write with 70% accuracy a given number of sentences using expletives, interpolations, and transitional expressions.
- 1.13 The student will write with 70% accuracy a given number of sentences using parenthetical elements.
- 1.14 The student will write with 70% accuracy a given number of sentences employing repetition of words, phrases or ideas.
- 1.15 The student will rewrite a given number of paragraphs correcting errors in grammar and usage and improving clarity and readability.

## E.D.L. COMPONENT

## 1.0 BEHAVIORIAL OBJECTIVES - CONTROLLED READING

- 1.1 The EDL student will sequentially read a minimum of 5 controlled reader lessons in his coded reading level per 1/4 credit.
- 1.2 He will, before doing this, complete the study frames on the vocabulary words which he will encounter in each story from the programmed text of his coded workbook, checking himself.
- 1.3 He will record his reading speed per lesson per the dial setting on the CR chart in his folder.
- 1.4 He will take the comprehension test over each lesson read in such a manner, and he will record this score on the CR chart.
- 1.5 He will compute his Index (reading speed in words per minute, times percentage of comprehension over the test) and he will record this on the controlled reader graph in figures and plots.
- 1.6 He will memorize and be able to write out from memory the EDL definition of the Controlled Reader objectives which is as follows:

CONTROLLED READING IS A FORM OF TRAINING IN WHICH SYMBOLS, WORDS, OR STORIES ARE PROJECTED IN A LEFT-TO-RIGHT MANNER AT A PRE-DETERMINED RATE TO DEVELOP FUNCTIONAL VISUAL EFFICIENCY, READING FLUENCY, AND COMPREHENSION SKILLS.

- 1.7 He will also be able upon request to define any terms used in the above definition in his own words and concepts of it. For example: (READING FLUENCY IS THE ABILITY TO READ SILENTLY & RAPIDLY, WITH THOROUGH AND ACCURATE COMPREHENSION OR UNDERSTANDING. FUNCTIONAL VISUAL EFFICIENCY IS THE ABILITY TO COORDINATE THE EYES COMFORTABLY DURING THE READING ACT, WITH POSITIVE LEFT-TO-RIGHT DIRECTIONAL ATTACK.)



## 2.0 WORD CLUES AND RECOGNITION (PROGRAMMED WORKBOOKS IN VOCABULARY) FLASH-X EDL

- 2.1 The EDL student will sequentially complete a minimum of 5 vocabulary lessons in his coded reading level per 1/4 credit with the programmed text and flash-X.
- 2.2 He will write out the words and make appropriate multiple choices of definitions from the context clues per frame, checking himself per the subsequent frame.
- 2.3 He will drill himself on aggressively seeing and recording from visual memory the words he defined from the corresponding flash-x disks & instrument correlating to the word clue programmed text. (This individual tach-x flashes at 1/25 second). In this manner he will drill & train himself to see and spell more rapidly and accurately.
- 2.4 He will take the corresponding word clues lesson tests using both the programmed test and flash-x.
- 2.5 He will check his reading level placement on a word clue pretest using words in context and on a word clue post-test in context, the teacher administering this standardized EDL test and recording his scores for follow-up placement and re-placement.
- 2.6 He will memorize and write out from memory the definition of Word Clues objectives: which is for levels 7-13 & builds skills in using context clues, teaching awareness of multiple meanings, & reinforces word knowledge.

CONTEXT CLUES - technique for unlocking meaning of an unfamiliar word through study of its setting.

WORD MEANINGS & USAGE - awareness of multiple meanings, ability to choose appropriate meaning from dictionary entry, ability to change a word's form to suit context; sensitivity to correct usage.

- 2.7 He will be able to define any terms used in the above and below definitions in his own words and concepts of the exercises.
- 2.8 VISUAL MEMORY -- ability to retain accurate mental images of word forms, with all letters, (or figures) in proper sequence.

SPELLING GENERALIZATIONS -- phonetic and structural principles that underlie the spelling of words with similar spelling patterns with the students discovering the underlying generalizations on their own.

PERCEPTUAL ACCURACY - - rapid identification, accurate recognition, and orderly retention of visual material.

INSTANT WORD RECOGNITION -- ability to recognize words quickly and accurately, vital to efficient reading with good comprehension.

## 3.0 STUDY SKILL LIBRARY (Referenced boxes or study kits). EDL COMPONENT

- 3.1 The EDL student will, without regard to grade or reading level code, complete 5 SSL lessons per 1/4 credit.
- 3.2 He will read one of the lesson sheets chosen from the available 10 of the many boxes.
- 3.3 He will complete the corresponding expendable assignment sheet over the lesson chosen.
- 3.4 He will check his answers from the available answer check sheets.
- 3.5 He will record his score and log it on the SSL Log record to keep track of the lessons chosen, completed, and degree of efficiency in work.

- 3.6 He will memorize and be able to write out from memory the EDL definition of the Study Skill Library objectives which is as follows:

**STUDY SKILLS**—skills of reading needed for study purposes; for example finding author's purpose, drawing conclusions, checking accuracy, recognizing facts and opinions, finding main ideas, outlining, classifying, using parts of a book, using reference material.

**TACTICS FOR CONTENT AREA READING**—techniques for previewing a chapter, using typographical aids and illustrations, studying special vocabulary.

- 3.7 He will be able to define any terms used in the above definitions in his own words concepts of the exercises.

## 4.0 LISTENING (Tapes &amp; Cassettes) EDL

- 4.1 The EDL student will listen to the 5 tapes in his coded reading level per 1/4 credit.
- 4.2 He will, before doing this, follow along in the corresponding programmed text.
- 4.3 He will write out the taped speaker's and text's requests.
- 4.4 He will score himself as he goes listening along per the immediate reinforcement of the speaker.
- 4.5 He will compute and record his scores per the percentage charts in the workbooks and on his individual folder graphs.
- 4.6 He will memorize and write out from memory the definition of the EDL program which is as follows in the Listening portion:

**LISTENING COMPREHENSION**—ability to listen with attention, discrimination, organization, and retention.

**THINKING SKILLS**—skills basic to effective listening; analytical, interpretive, appreciative and critical thinking.

**READING SKILLS**—needed for content area learning and literary interpretation.

## 5.0 READING 300 LIBRARY (Paperbacks) EDL COMPONENT

- 5.1 The EDL student will, when able or for flexibility under the contract grade system, read up to 2 as a minimum R-300 paperback books.
- 5.2 He may substitute 1 corresponding book report for each of these books read in the top (A-B) minimum and bottom (C) minimum for 1/4 credit.
- 5.3 He will save these written reports in his folder and do them according to a standard report assignment sheet.
- 5.4 He will have these read subjectively and discussed with him by his teacher.
- 5.5 He will proceed toward more such reading activities as his other EDL skills improve until he is able or interested in entering in part or whole the other R-5 Components of Communications.
- 5.6 He will complete enrichment exercises to vary his EDL pattern with such resources available as the Springboards, Readers Digests, Puzzles, Book Reports, etc., per teacher consultation.
- 5.7 He will complete his optional A & B (5 units per each) slots with his extended activities as previously set forth.

## 6.0 EVALUATION EDL COMPONENT

- 6.1 Consequently each EDL student will complete a minimum of 30 EDL lessons per 1/4 credit for a C grade.
- 6.2 He will elect to complete 35 lessons for a B,
- 6.3 He will elect to complete 40 lessons for an A.
- 6.4 These lessons are noted and spread among the 5 noted performance objectives: 1.1 Controlled Reading, 2.1 Word Clues & Recognition, 3.1 Study Skill Library, 4.1 Listening & Reading, Writing, Thinking and 5.1 Reading 300 Library.
- 6.5 The student and teacher or aide, records the lessons completed on his individual folder.
- 6.6 Given a quantity grade of C, the student may receive a B- for quality on those lessons which are measurable.
- 6.7 Given a quantity grade of B, the student may receive an A- for quality on those lessons which are measurable.
- 6.8 In the above set manner, he will sequentially continue through his 1/4 credit laps up to 4 years and in his pre-post coded grade level workbooks.

## MAN AND HIS MODES

## 1.0 MAN SERIES STRUCTURED

- 1.1 Given the text, MAN IN THE FICTIONAL MODE, the student will analyze each story in a written composition to the best of his ability all the 8 essential questions for interpretation of any fictional narrative, namely:
- 1.11 What does the author want me to generalize about the characters & especially the central characters?
  - 1.12 What important change or revelation occurred in the central character(s)? And/or what new or significant vision of the world did I grasp through the eyes or sympathy or identification with the central character(s)?
  - 1.13 How can I graph the plot according to the growth and release of tension on the standard chart of Exposition, Complication, Climax, Resolution, and Conclusion?
  - 1.14 How is the setting integrated with the theme?
  - 1.15 How is the plot integrated with the theme?
  - 1.16 How are the characters integrated with the theme?
  - 1.17 From what point of view is the story told?
  - 1.18 What is the theme of the work? Is it universal?
- 1.2 Given the text, MAN IN THE EXPOSITORY MODE, the student will analyze each story in a written composition to the best of his ability all the 5 essential questions for interpretation of any expository work such as essay, biography, autobiography, travelog, namely:
- 1.21 If the work is book-length, how does the theme of each chapter develop the theme of the whole book?
  - 1.22 If the work is a reasonably short essay, how is its theme developed?
  - 1.23 If the work is biography, what important facts & judgments about the subject's life fall into the following time-divisions: (a) his cultural & family background, (b) his youth, (c) his education, (d) his maturity, (e) his decline, (f) his death, (g) a general analysis of his personality, (h) his achievements, and his effect on his own & later generations?  
Note: These questions may also apply to autobiography.
  - 1.24 If the work is history, what important data belongs to one or more of the following convenient divisions? (a) Year-by-year, or century-by-century, or term-by term, etc. (b) The data pertinent to the history of one nation, then another? (c) Subject-by-subject--the data of religious importance then political, cultural, economic, etc.
  - 1.25 Can I construct a graph of the plot? What is the significance of the structure & style?

- 1.3 Given the text, MAN IN THE POETIC MODE, the student will analyze at least 20 of the poems in a written composition to the best of his ability, answering all the 5 essential questions for interpretation of any pertinent selections covered, namely:
- 1.31 How does the author's use of figurative language & symbols affect the development of the theme?
  - 1.32 Why did the author use this word or image or technique rather than another? And what is the meaning of his poem in prose language?
  - 1.33 How does the imagery of the poem contribute to the shaping of the theme?
  - 1.34 How does the metrical pattern of the poem help shape the meaning of a particular passage or the total meaning of the poem and/or its title?
  - 1.35 How do rhyme and other audial techniques & style contribute to the effect of the particular passage or the entire poem?
- 1.4 Given the text, MAN IN THE DRAMATIC MODE, the student will analyze each play in a written composition answering to the best of his ability all the 5 essential questions for the interpretation of plays, movies, & TV, namely:
- 1.41 What is the total effect of the play as a combined venture by author, director, actors, & stage technicians?
  - 1.42 How does the work as a drama develop its theme in setting, plot, and character?
  - 1.43 How successfully does the author exploit the various dramatic stage-conventions to accomplish his theme and effect? E.g., asides & soliloquies, confidants, prologue & epilogue, Greek chorus, etc.
  - 1.44 How can you compare this written play to the movie & TV techniques? or vice versa.
  - 1.45 If poetic drama or closet drama, tragedy or comedy is the experience worthwhile and why?
- 1.5 Given his choice of 1 NOVEL per each of the above modes, the student will read and complete a comprehensive composition pertinent to any of the above requirements and to the best of his ability answer the 5 basic questions for interpretation of any work, namely:
- 1.51 What is my final evaluation of the work? How does the work clarify, support, or contradict my own concept of what the "Good Life" is?
  - 1.52 How does a final reading and analysis of the work compare with my first unanalyzed impressions?
  - 1.53 Is the development of the theme handled so intelligently that the work help or hinders me to understand aspects of life previously confusing & inexplicable to me? Or is it according to my own philosophy of life a work to be considered artistically inferior? or superior?
  - 1.54 How does the theme as it is developed in the work, agree with my moral principles?
  - 1.55 How does it compare with other works & universal themes, and why did I like or dislike it?

## 2.0 MANKIND SERIES NON-STRUCTURED

- 2.1 Given the non-structured MAN SERIES called MANKIND, the student will choose an equivalent amount of SHORT STORIES as related to MAN IN THE FICTIONAL MODE, and he will analyze each story in a written composition to the best of his ability all the 8 essential questions for interpretation as listed in the MAN SERIES. (1.1)
- 2.2 Given the non-structured MAN SERIES called MANKIND, the student will choose an equivalent amount of NON-FICTION works as related to MAN IN THE EXPOSITORY MODE, and he will analyze each story in a written composition to the best of his ability all the 5 essential questions for interpretation as listed in the MAN SERIES. (1.2)
- 2.3 Given the non-structured MAN SERIES called MANKIND, the student will choose an equivalent amount of POEMS available in the two texts, NOW POETRY & HOW TO READ A POEM; and he will read the 1st text then write a sample poem patterned after each type encountered in NOW POETRY. Then he will do all the assignments in HOW TO READ A POEM to the best of his ability, and he will take a test over the related 5 essential questions for interpretation as listed in the MAN SERIES, also completing the Figures of Speech test with 70% accuracy. (1.3)
- 2.4 Given the non-structured MAN SERIES called MANKIND, the student will choose an equivalent amount of PLAYS as related to MAN IN THE DRAMATIC MODE, and he will analyze each play in a written composition to the best of his ability all the 5 essential questions for interpretation as listed in the MAN SERIES. (1.4)
- 2.5 Given his choice of 1 NOVEL per each of the above selections, the student will read and complete a comprehensive composition pertinent to any of the above requirements and to the best of his ability answer the 5 basic questions for interpretation of any work as listed in the MAN SERIES. (1.5)
- 2.6 As in any of these related communications courses, final evaluations will be based upon how well the individual student supports and presents his own ideas in relation to his assignments and the subject matter with emphasis upon quality rather than quantity.
- 2.7 Note: for each of the Man Series, Structured & Non-structured, the student may have the option of submitting 1/2 of the required written analyses in the form of a simplified book review or creative follow-up, namely: posters, collages, diaries, role taking, sequels, etc.

## 3.0 CONTACT SERIES ANTHOLOGIES

3.1 Given any 2 of the following 8 Contact Series texts and themes:

DRUGS	LAW
ENVIRONMENT	LOYALTIES
FUTURE	MATURITY
IMAGINATION	PREJUDICE

the student will read the entire book.

3.2 Given the corresponding logbook, the student will complete at least  $3/4$  of the assignments and will be subjectively evaluated according to how well he supports his own ideas about the related themes.

3.3 Given the related test(s) over the texts, the student will complete them with a 70% score.

3.4 Given extra activities or substitutions per the student-teacher consultation for individualization and enrichment, the student will complete at least 1 activity per text to be subjectively evaluated for quality.

3.5 Final evaluations will be based upon how well the individual student supports and presents his own ideas and upon the total of the above scores with emphasis upon quality rather than quantity.

## Mass Media

## -1.0 Newspaper

- 1.1 The student will identify with 70% accuracy the parts of a newspaper and its functions.
- 1.2 The student will explain the purpose, construction and punctuation of headlines.
- 1.3 The student will explain the various ways news is gathered.
- 1.4 The student will identify and critically analyze the various parts of a straight news story as compared to a feature story.
- 1.5 The student will explain the processes involved in publishing a newspaper.
- 1.6 The student will scan and skim news articles to locate specific information.
- 1.7 The student will use pictures and tables in the newspaper to get information quickly.
- 1.8 The student will figure percentages or games won and lost from the sports page.
- 1.9 The student will interpret figurative language, mythological allusions and words derived from Greek and Latin as used on the sports page.
- 1.10 The student will distinguish between information the paper reports on its own authority and information it attributes to others.
- 1.11 The student will compare and analyze several versions of the same story.
- 1.12 The student will use the mathematical processes needed to figure true annual interest and the dollar difference between a cash purchase and a credit purchase.
- 1.13 The student will ascertain the kinds of jobs available and the qualifications and experience each requires by reading newspaper ads.
- 1.14 The student will analyze a newspaper editorial differentiating between information and opinion.
- 1.15 The student will "read" the pictorial symbols in which the editorial cartoon expresses opinions.
- 1.16 The student will analyze letters to the editor and will write his own.



- 1.17 The student will explain the purpose of special columns in the newspaper.
- 1.18 The student will compare ad copy and editorial copy.
- 1.19 The student will practice using ads to establish price range for a purchase, become familiar with features to look for, figure credit costs, infer pitfalls, and distinguish information from non-information.
- 1.20 The student will gather information and evaluate pro-and-con arguments concerning political issues.
- 1.21 The student will read and interpret stock market tables, figure dividends and determine profit and loss on the sale of stocks.
- 1.22 The student will discern how the news affects the stock market.
- 1.23 The student will develop criteria to use in evaluating newspapers.
- 1.24 The student will define "free press".
- 1.25 The student will define with 70% accuracy given newspaper jargon.

## ORAL COMMUNICATIONS

## 1.0 SPEECH &amp; SPEAKING

- 1.1 The student will complete the check sheets on his speaking abilities to measure himself to standard yard sticks on speaking.
- 1.2 He will record a critical incident which occurred on the job or elsewhere, filling in one complete sentence per blank, & consequently he will tell about this incident in an impromptu speech or role playing situation to the group.
- 1.3 The student will listen to several of the taped Great American Speeches series and critique them.
- 1.4 The student will measure the above speeches and be measured by his teacher on his critiquing completeness according to detail & specifics in note taking.
- 1.5 The student will take a pop quiz over what the function of critiquing is and pass it with a 70% score.

## 2.0 OUTLINING &amp; ORGANIZING

- 2.1 The student will correlate outlines on discussion and debate to the corresponding cartoons worth up to 11 units.
- 2.2 The student will be graded on the outcome of his correlation endeavors by his teacher's written & spoken feedback.
- 2.3 The student will compare his correlations to those of his classmates.
- 2.4 The student will make one of his own outlines & one of his own cartoons about oral communications.
- 2.5 The student will log what parts of the above exercises on the Outlining & Organizing lap in which he took part and was rated.

3.0 PARLIAMENTARY PROCEDURE

- 3.1 The student will study & take a test over the Chart of Motions for Parliamentary Procedure passing it with at least a 70% score.
- 3.2 The student will conduct a mock meeting in a mock election or other activity.
- 3.3 The student will follow the mock meeting Order of Business & be able to write out this Order.
- 3.4 The student will keep notes on the procedures & outcomes of the meeting(s).
- 3.5 The student will log what parts of the above exercises on the preceding lap in which he was involved & rated.

4.0 THE BOMB TECHNIQUES

- 4.1 The student will read the handout problem on THE BOMB or a related problem, and discuss assignments.
- 4.2 The student will role play the parts established in the problem-solving BOMB lap.
- 4.3 The student will solve as a group the BOMB or a related problem.
- 4.4 The student will examine the discussion critique (s) & critique a previous discussion as well as his own.
- 4.5 The student will log what parts of the above exercises on techniques laps in which he was involved, rated, & critiqued.

5.0 PROBLEM SOLVING

- 5.1 The student will summarize the Motivated Sequence over his problem-solving activity(s) on THE BOMB or other such exercises.
- 5.2 The student will correlate the speaker's Motivated Sequence steps to the Scientific Method & Group Discussion Methods of problem solving.
- 5.3 The student will list on the Five Steps Cartoon those steps to problem solving that he has memorized for procedural purposes.
- 5.4 The student will pass a pop quiz over the above procedures & pass it with a 70% score.
- 5.5 As in all Oral Communications activities, the student will be evaluated upon his own, his peers" & his teacher's evaluations & participations with full knowledge that he is judged without bias but upon how well he supports his own ideas in relationship to the subject matter being covered.

## 6.0 TOPICS STRUCTURED

- 6.1 The student will by parliamentary procedure or other procedure choose a broad topic from the 10 possible areas of suggested topic kick-offs, namely: Law & Liberty; Life Facts of; Manners; Marriage; Movies, Radio, TV; Parent-Child Relationships; Psychology; Politics & Government; Sex Differences, Sociology.
- 6.2 The student will then either limit this choice to a sub-topic of 10 by the same process &/or complete all questions on the questionnaire after discussion to be graded subjectively by his teacher.
- 6.3 The student will discuss the topic chosen by the group employing those aspects of the previous laps set.
- 6.4 The student will evaluate himself & peers through tape playbacks & on group discussion or other critiques.
- 6.5 The student will log what parts of the above exercises on the topics laps in which he was involved & rated

## 7.0 TOPICS NON-STRUCTURED

- 7.1 The student will do exactly as with the Structured Topics in (6.0).
- 7.2 The student will, because of the nature of the class, participate in any other speech activities he & his classmates, & teacher find themselves gravitated toward.

## 8.0 DEBATE

- 8.1 The student will listen to several types of debates and will conduct several types of debates with his classmates using the debate formates for note taking, making, & critiquing.
- 8.2 The student may elect to conduct any of the Structured or Non-structured Topics for discussion in a debate manner.

## Reading Skills

## 1.0 Tactics in Reading Skills

- 1.1 The student will determine with 70% accuracy the correct meaning of a given number of words using context, sound clues, structure and the dictionary.
- 1.2 The student will divide with 70% accuracy a given number of words into syllables.
- 1.3 The student will identify with 70% accuracy the central idea and the supporting ideas in given paragraphs.
- 1.4 The student will determine with 70% accuracy which ideas have been suggested in a given story.
- 1.5 The student will be able to arrange with 70% accuracy a given number of events in the order in which they occur in a given story he has read without referring back to the story.
- 1.6 The student will identify with 70% accuracy the things being compared by various figures of speech in given sentences.
- 1.7 The student will determine with 70% accuracy the meanings of a given number of sentences.
- 1.8 The student will decide with 70% accuracy which conclusions can reasonably be made from information presented in a given number of short paragraphs.
- 1.9 The student will identify with 70% accuracy which of the following patterns a given number of paragraphs contains: the time order, comparison-contrast, cause-effect or simple listing.

## 2.0 Problem Solving in Reading Skills (Name of the Game)

- 2.1 The student will answer correctly a given number of problem solving questions covering a given number of short stories.
- 2.2 The student will evaluate a given number of stories on the basis of their validity and possible application to his own life.
- 2.3 The student will compose a given number of short stories or story endings similar in mood and type to the given selections.
- 2.4 The student will, with 70% accuracy, define from context a given number of pertinent words from each story.
- 2.5 The student will listen to and analyze a recorded song pertaining to this unit of short stories.
- 2.6 The student will complete with 70% accuracy a given number of word games and reference book exercises.

# Spelling

## 1.0 Troubleshooter in Spelling

- 1.1 The student will spell with 70% accuracy words by adding given consonants to a given number of word endings or beginnings.
- 1.2 The student will use digraphs and diphthongs to spell with 70% accuracy a given number of words.
- 1.3 The student will distinguish between the different sounds of c and g with 70% accuracy in a given number of words.
- 1.4 The student will distinguish between long and short vowel sounds with 70% accuracy in a given number of words.
- 1.5 The student will apply spelling rules concerning adding suffixes beginning with vowels to spell a given number of words with 70% accuracy.
- 1.6 The student will apply spelling rules concerning ie and ei to spell a given number of words with 70% accuracy.
- 1.7 The student will apply spelling rules concerning forming plurals to spell a given number of words with 70% accuracy.
- 1.8 The student will spell a given number of commonly misspelled words with 70% accuracy.
- 1.9 The student will alphabetize a given number of words with 70% accuracy.
- 1.10 The student will determine with 70% accuracy what words would appear on the same page in a dictionary as two given guide words.
- 1.11 The student will pronounce with 70% accuracy a given number of words he has looked up in the dictionary.
- 1.12 The student will spell with 70% accuracy a given number of words using common roots, prefixes and suffixes.
- 1.13 The student will differentiate between synonyms, antonyms and homonyms with 70% accuracy in a given list of words and sentences.
- 1.14 The student will identify with 70% accuracy the correct words to be used in a given sentence from a list of commonly misused words.
- 1.15 The student will select with 70% accuracy the unrelated word from a set of related words in a given number of word sets.



## Vocabulary

## 1.0 Word Studies

- 1.1 The student will divide with 70% accuracy a given number of words into syllables marking the vowel and consonant sounds and inserting accents.
- 1.2 The student will underline with 70% accuracy diphthongs and digraphs in a given number of words.
- 1.3 The student will write with 70% accuracy the abbreviation for the parts of speech of a given number of words and use them in sentences.
- 1.4 The student will identify with 70% accuracy the word root and formulate and spell a new word from a given number of words.
- 1.5 The student will formulate with 70% accuracy new words by adding suffixes or prefixes.
- 1.6 The student will determine with 70% accuracy the meaning of a given number of words using the meanings of roots, prefixes and suffixes.
- 1.7 The student will formulate antonyms with 70% accuracy by adding or changing prefixes in a given number of words.
- 1.8 The student will correct with 70% accuracy a given number of incorrectly hyphenated words.
- 1.9 The student will formulate with 70% accuracy the plural of a given number of words.
- 1.10 The student will form with 70% accuracy the possessives or contractions of a given number of words.
- 1.11 The student will indicate with 70% accuracy the correct pronunciation or a given list of words using diacritical marks.
- 1.12 The student will complete with 70% accuracy a given number of sentences with foreign words that have been incorporated into our vocabulary.
- 1.13 The student will define with 70% accuracy a given number of diacritical marks and list with 70% accuracy a given number of words that would make use of the marks.
- 1.14 The student will identify with 70% accuracy a given number of proper nouns.
- 1.15 The student will change with 70% accuracy all words which have been misused in a given paragraph.
- 1.16 The student will choose with 70% accuracy the correctly spelled word to fit in a given number of sentences.

- 1.17 The student will choose with 70% accuracy the correct capital city for a given number of states.
- 1.18 The student will give with 70% accuracy the proper abbreviation for a given number of phrases.
- 1.19 The student will define and use in a sentence with 70% accuracy a given number of technical or special interest words.



## Vocational Communications

## I.0 Business Communications

- 1.1 The student will correctly fill out an order form.
- 1.2 The student will correctly write and prepare for mailing a given number of business letters.
- 1.3 The student will correctly fill out a social security application.
- 1.4 The student will select the words indicated by a given number of abbreviations used in want ads.
- 1.5 The student will effectively answer a chosen want ad with a telephone call.
- 1.6 The student will correctly prepare a personal data sheet for his own use.
- 1.7 The student will correctly write a letter of application.
- 1.8 The student will correctly fill out a given number of job application forms.
- 1.9 The student will evaluate letters of application, personal data sheets, application forms, letters of reference and interviews for a given number of job applicants.
- 1.10 The student will conduct an effective interview and evaluate it according to given criteria.

## 2.0 INDUSTRIAL COMMUNICATIONS

- 2.1 The student will read & take notes from the 5 listed areas of the text COMMUNICATIONS IN INDUSTRY, namely:
  - 2.11 Radio, TV, & Motion Pictures
  - 2.12 Newspapers, Magazines, Books
  - 2.13 Telephone & Telegraph
  - 2.14 U. S. Post Office Department
  - 2.15 Business Management
- 2.2 The student will select 1 or more areas of potential interest in each of the 5 listed Job Opportunities sections & write a proper letter to request information & brochures from the Sources of Information sections, using sample letter forms.
- 2.3 The student will mail these 5 letters to his chosen Sources of Information sections after they have been approved, corrected mechanically by & with his teacher & rewritten in ink or, if capable, typed.
- 2.4 The student will compile a resource notebook of materials received from his correspondences for future references & comparisons.
- 2.5 The student will prepare an interview sheet with 10 or more appropriate questions he would like to ask each of his 5 chosen areas of industry in town.
- 2.6 The student will conduct each interview, taking notes, or if this is impossible will listen & take notes to 5 or more interview tapes, writing a 1 page essay about each Interview Tape.
- 2.7 The student will submit his own consumer-experiences analyses or that of his friends' in an essay over each of the 5 types of industries with a minimum of 1 page.
- 2.8 The student will study the total text, section, & glossary to take a multiple choice/ true-false test over the text scoring 70% proficiency.
- 2.9 The student will be allowed some flexibility at teacher discretion to substitute the A/V Vocational Decisions or other vocational supplements for the interview or resource sections.
- 2.10 Each assignment will be subjectively & individually assigned a letter grade according to effort, outcome, quantity & quality averaged.

## Behavioral Objectives

## Consumer Math

## LAP 1.0

## Improving Fundamentals

- 1.1 Given an addition problem with varied digits, the student will find the sum with 70% accuracy.
- 1.2 Given a subtraction problem with varied digits, the student will find the difference with 70% accuracy.
- 1.3 Given three multiplication problems with a multiplier of two digits or larger, the student will find the product with 70% accuracy.
- 1.4 Given four division problems with divisors of two digits or more, the student will find the quotient with 70% accuracy.
- 1.5 Given two word problems on averages the student will be able to compute an average and find a missing number given the average with 70% accuracy.
- 1.6 Given a word problem the student will demonstrate his knowledge of the four basic operations by selecting the correct operation and finding the solution with 70% accuracy.

## LAP 2.0

## Fractions

- 2.1 Given a fraction the student will be able to name its numerator and denominator.
- 2.2 Given a mixed number the student will change it to an improper fraction with 70% accuracy.
- 2.3 Given a non-prime fraction the student will reduce it to prime with 70% accuracy.
- 2.4 Given a list of fractions with uncommon denominators, the student will rank them in order of size with 70% accuracy.
- 2.5 Given three problems with mixed fractions and uncommon denominators the student will find the sum or difference with 70% accuracy.
- 2.6 Given two problems with mixed fractions the student will find the product or quotient with 70% accuracy.
- 2.7 Given three word problems the student will select one of the four basic operations and find the solutions with 70% accuracy.

## LPA 3.0

## Decimals

- 3.1 Given a decimal the student will change it to a fraction with 70% accuracy.
- 3.2 Given a numeral fraction or written fraction (english) fraction, the student will write it as a decimal with 70% accuracy.
- 3.3 Given a list of decimals of varied digits the student will rank them in order of size with 70% accuracy.
- 3.4 Given two problems the student will convert from a form of measure to the corresponding aliquot part with 70% accuracy.
- 3.5 Given two problems with varied decimal digits the student will find the sum or difference with 70% accuracy.

- 3.6 Given two multiplication problems with varied decimal digits and multipliers of two digits or more the student will find the product with 70% accuracy.
- 3.7 Given two division problems with varied decimal digits and divisors of three or more digits the student will find the quotient with 70% accuracy.
- 3.8 Given three word problems the student will apply the four basic operations and arrive at a solution with 70% accuracy.

## LPA 4.0

## Per Cent

- 4.1 Given two varied decimals the student will change them to a per cent with 70% accuracy.
- 4.2 Given a per cent, decimal, and fraction the student will change them to a common form and rank them in order of size, with 70% accuracy.
- 4.3 Given five word statements using variations of per cent of the students will translate them into an algebraic statement and find the solution with 70% accuracy.
- 4.4 Given four word problems requiring finding a per cent one number is of another, the student will find the solution with 70% accuracy.

## LAP 5.0

## Using The Services Of A Bank

- 5.1 Given four interest problems with a variety of interest rates and time periods, the student will compute the interest by the simple interest method with 70% accuracy.
- 5.2 Given four interest problems with a variety of interest rates and time periods less than one year, the student will compute the interest using the 6% 60 day method, with 70% accuracy.
- 5.3 Given a bank balance and checkbook balance the student will reconcile his checking account with 70% accuracy.
- 5.4 Given appropriate comparison figures the student will be able to determine the cost and advantages of various bank services.

## LAP 6.0

## Savings And Investment

- 6.1 Given two problems the student will determine the purchase price of U.S. Savings Bonds, with 70% accuracy.
- 6.2 Given two problems the student will compute the purchase price and interest on \$1000 par value bonds, with 70% accuracy.
- 6.3 Given two problems the student will find the cost of stock purchased with 70% accuracy.
- 6.4 Given a bond purchase and a stock purchase the student will find the rate of return on each of these investments with 70% accuracy.
- 6.5 Given two compound interest problems the student will find the interest due by repetitions use of the simple interest method with 70% accuracy.

- 7.1 Given two problems stating the cost and per cent — of mark-up or discount the student will find the selling price, with 70% accuracy.
- 7.2 Given two problems stating the invoice terms the student will find the cash discount and amount due, with 70% accuracy.
- 7.3 Given the total costs and total sales the student will compute the gross profit and the net profit, with 70% accuracy.
- 7.4 Given two problems stating the cost and gross profit the student will determine the per cent of mark up with 70% accuracy.
- 7.5 Given three problems dealing with installment purchases, the student will find the credit charge, total price and amount of each payment, with 70% accuracy.

## LAP 8.0

## Taxes

- 8.1 Given three problems detailing the hours worked and rate of pay, the student will compute the total wages \$ F.I.C.A., with 70% accuracy.
- 8.2 Given two purchases the student will compute the sales tax due, with 70% accuracy.
- 8.3 Given three word problems on property taxes the student will compute the assessed valuations the tax rate, and the tax due, with 70% accuracy.
- 8.4 Given two problems, on income tax the student will find the adjusted gross income (taxable income) and the tax due, with 70% accuracy.

## LAP 9.0

## Insurance

- 9.1 Given two problems detailing the territory designation and basic rate the student will compute the various types of liability coverage, with 70% accuracy.
- 9.2 Given three word problems covering general liability collision automobile insurance, the student will find the amount paid by the insurance company and the policy holder, with 70% accuracy.
- 9.3 Given three word problem on fire insurance and home-owners insurance, the student will compute the premium and the amount covered in a specified instance of damage with 70% accuracy.
- 9.4 Given two problems on life insurance the student will determine the premium cost and the amount the beneficiary will receive (dependent upon the type of insurance), with 70% accuracy.

## LAP 10.0

## Special Problems

- 10.1 Given three problems the student will divide his salary into budget categories by percent allocation, with 70% accuracy.
- 10.2 Given two problems on depreciation, the student will find the average annual depreciation and the estimated value of equipment, with 70% accuracy.

10.3. Given two problems, the student will compute weekly wages and overtime on a weekly basis, with 70% accuracy.

10.4. Given two problems, the student , will determine weekly wages and overtime on a daily basis; with 70% accuracy.

## Behavioral Objectives

## Math II

## LAP 1.0

## Fractions

- 1.1 Given two problems of adding numerous mixed fractions with uncommon denominators, the student will find the sum with 70% accuracy.
- 1.2 Given three problems of subtraction of mixed fractions, with uncommon denominators, the student will find the sum with 70% accuracy.
- 1.3 Given two multiplication problems of mixed fractions the student will find the product with 70% accuracy.
- 1.4 Given two division of mixed fractions problems, the student will find the quotient with 70% accuracy.
- 1.5 Given three problems with a minimum of three mixed fractions and a combination of the operations of multiplication and division the student will find the quotient with 70% accuracy.
- 1.6 Given three word problems, the student will select a combination of the four basic operations and find the solutions with 70% accuracy.

## LAP 2.0

## Decimals

- 2.1 Given two problems in addition or subtractions of mixed decimals the student will find the sum or difference with 70% accuracy.
- 2.2 Given three multiplication of mixed decimals problem, the student will find the product with 70% accuracy.
- 2.3 Given two problems in division of decimals with divisors of three digits or more, the student will find the quotient with 70% accuracy.
- 2.4 Given three varied fractions, the student will change them to a decimal and then to a per cent with 70% accuracy.
- 2.5 Given two word problems concerning the industrial application of per cent, the student will find the solution with 70% accuracy.

## LAP 3.0

## Percentage

- 3.1 Given four problems in finding "Percent of ". The student will change the varied fractional, decimal equivalent and determine the required percentage with 20% accuracy.
- 3.2 Given three number sentences in using per cent, the student will change them to algebraic statements and find the required solution with 70% accuracy.
- 3.3 Given three word problems dealing with consumer applications of per cent, the student will use an algebraic statement and find the solution with 70% accuracy.

## LAP 4

## Finance

- 4.1 Given four problems in converting from one unit of measure to another unit of measure, the student will find the solution with 70% accuracy.
- 4.2 Given two word problems in industrial finance the student will compare production costs to potential sales and determine the solvency of the company with 70% accuracy.
- 4.3 Given two word problems in mark up or discount, the student will determine the new selling price with 70% accuracy.
- 4.4 Given two word problems concerning deductions from weekly pay, the student will figure weekly take home pay or weekly salary before deductions, with 70% accuracy.

## LAP 5

## Ratio &amp; Proportion

- 5.1 Given four problems comparing one thing to another, the student will express them in simplified ratio form, with 70% accuracy.
- 5.2 Given four word problems detailing various consumer uses or direct proportion the student will set up the proportion and find the solution with 70% accuracy.
- 5.3 Given two indirect proportions on gear reduction the student will set up the proportion and find the solution with 70% accuracy.

## Geometry &amp; Formulas

- 6.1 Given three problems illustrating a rectangle, triangle, and circle, the student will find the perimeter and area by writing the appropriate formula, substituting and arriving at a solution with 70% accuracy.
- 6.2 Given two word problems on rectangles, circles or triangle the student will write the formula, substitute and solve for any of the variables in the formula, with 70% accuracy.
- 6.3 Give the dimensions of a rectangular solid, the student will find the volume, with 70% accuracy.
- 6.4 Given two word problems employing the use of the distance formula, the student will write the formula, substitute and solve for any variable in the formula, with 70% accuracy.
- 6.5 Given two word problems on interest, the student will write the formula, substitute and solve for any variable in the formula, with 70% accuracy.



## LAP 7 Four Basic Operations on Polynomials

- 7.1 Given two problems containing polynomials, the student will add or subtract them with 70% accuracy.
- 7.2 Given four problems containing monomials, the student will multiply or divide these with 70% accuracy.
- 7.3 Given two binomials, the students will find the product with 70% accuracy.
- 7.4 Given three problems in multiplication of polynomials by monomials by removal of parentheses, the student will simplify them with 70% accuracy.
- 7.5 Given three polynomials, the student will divide by binomials and find the quotient, with 70% accuracy.

## LAP 8 Literal Equations

- 8.1 The student, upon inspection of an equation will name its degree.
- 8.2 Given two problems of equations in one variable, the student will find the solution set with 70% accuracy.
- 8.3 Given two problems containing single operation equations, the student will find the solution to a selected variable in terms of other variables, with 70% accuracy.
- 8.4 Given five problems containing numerous unknowns, the student will find the solution set for a selected variable in terms of other variables, with 70% accuracy.
- 8.6 The student will correctly substitute the solution set in all the above equations and check the problems.

## LAP 9 Systems of Linear Equations

- 9.1 Given two problems with values for  $X$  or  $Y$ , the student will substitute and solve for the other variable, with 70% accuracy.
- 9.2 Given two problems with system of linear equations the student will solve them by addition, with 70% accuracy.
- 9.3 Given two problems with system of linear equations the student will solve them by subtraction with 70% accuracy.
- 9.4 Given two problems with systems of linear equations the student will solve them by addition subtraction.
- 9.5 Given two problems with systems of linear equations, the student will solve them by the substitution method with 70% accuracy.

## LAP 10 Applications to Problems

- 10.1 Given five word problems containing number sentences, the student will translate them into algebraic statements and find solution set with 70% accuracy.
- 10.2 Given two problems on consecutive integers, the student will find the integers with 70% accuracy.
- 10.3 Using the distance formula and box, the student will set up and solve for the missing variable in common travel problems with 70% accuracy.

## BEHAVIORAL OBJECTIVES

## MATH I

## WHOLE NUMBERS

- LAP 1.0
- 1.1 Given two multiple digit whole numbers the student will round them to a selected digit with 70% accuracy.
  - 1.2 Given two addition problems of three addends or more the student will find the sum with 70% accuracy.
  - 1.3 Given three subtraction problems the student will find the difference with 70% accuracy.
  - 1.4 Given three multiplication problems containing a minimum of three digits in the multiplicand and multiplier the student will compute the correct answer with 70% accuracy.
  - 1.5 Given five division problems varying from one digit to three digit divisors the student will find the quotient with 70% accuracy.
  - 1.6 Given three word problems requiring the use of combinations of the four basic operations the student will compute the answer with 70% accuracy.

## LAP 2.0 FRACTION

- 2.1 Given six problems containing proper fractions and improper fractions the student will change them to simplest form with 70% accuracy.
- 2.2 Given three problems containing 2 or more proper fractions the student will correctly determine the lowest common denominator and change the fractions to equivalent fractions in the LCD with 70% accuracy.
- 2.3 Given three problems in addition of fractions with uncommon denominators the student will compute the sum with 70% accuracy.
- 2.4 Given three subtraction problems involving uncommon denominators and borrowing, the student will compute the differences with 70% accuracy.

## LAP 3.0 FRACTIONS

- 3.1 Given three fractions with different denominators the student will rank them in size from largest to smallest.
- 3.2 Given two mixed numbers the student will change them to improper fractions with 70% accuracy.
- 3.3 Given three problems dealing with multiplication of mixed numbers the student will solve them with 70% accuracy.
- 3.4 Given three problems dealing with division of mixed numbers the student will find quotient with 70% accuracy.
- 3.5 Given four number sentences the student will translate them into algebraic statements and solve them with 70% accuracy.
- 3.6 Given 2 word problems the student will reduce them to algebraic statements and solve them with 70% accuracy.

## LAP 4.0 DECIMALS

- 4.1 Given four problems dealing with reading decimals the student will change them from the number to English and visa versa and will be able to rank them in order of size, with 70% accuracy.
- 4.2 Given two problem involving addition of a decimal of varied digits, the student will compute the sum with 70% accuracy.
- 4.3 Given two problems involving subtraction of decimals of varied digits, the student will compute the difference with 70% accuracy.
- 4.4 Given two problems involving multiplication of decimals the student will compute the product with 70% accuracy.
- 4.5 Given three varied division of decimals problems the student will compute the quotient with 70% accuracy.
- 4.6 Given two problems involving the use of the four basic operations with decimals, the student will find the answers with 70% accuracy.

## LAP 5.0 DECIMALS RELATED

- 5.1 Given three problems dealing with multiplication and division of decimals, the student will solve them by applying his knowledge of factors of 10 and moving the decimal point, with an accuracy of 70%.
- 5.2 Given three fractions with denominators that are fractions of 10 the student will change them to decimals with 70% accuracy.
- 5.3 Given two fractions the student will change them to decimals with 70% accuracy.
- 5.4 Given three decimals the student will change them to fractions with 70% accuracy.
- 5.5 Given two problems involving decimals and fractions the student will convert to one or the other and solve the problems with 70% accuracy.
- 5.6 Given two problems involving multiplication or division by 50 and the student will solve them by the short method with 70% accuracy.

## LAP 6.0 PER CENT

- 6.1 Given six problems involving all variations of per cent the student will change them to a decimal with 70% accuracy.
- 6.2 Given six problems involving all variations of decimals the student will change them to a per cent with 70% accuracy.
- 6.3 Given four problems involving all variations of per cents the student will change them to a fraction with 70% accuracy.
- 6.4 Given four fractions of all variations the student will change them to a per cent with 70% accuracy.

## LAP 7.0 PERCENT

- 7.1 Given three problems involving finding the per cent of a number, the student will find the solution with 70% accuracy.
- 7.2 Given three problems involving finding what per cent one number is of another number, the student will find the solution with 70% accuracy.
- 7.3 Given three problems involving finding what number is specified per cent of another number, the student will find the solution with 70% accuracy.
- 7.4 Given six word problems involving varied consumer applications of finding per cent, the student will solve them with 70% accuracy.

## LAP 8.0 SQUARES &amp; SQUARE ROOTS

- 8.1 Given six varied numbers (whole numbers, fractions, mixed fractions and decimals) the student will square them with 70% accuracy.
- 8.2 Given six varied numbers (whole numbers, fractions, and decimals) the student will find the square root with 70% accuracy.
- 8.3 Given three word problems dealing with applications of squares and square roots, the student will solve them with 70% accuracy.

## LAP 9.0 MEASUREMENT

- 9.1 Given three word problems the student will apply his knowledge of the area of a rectangle and find the solution to these consumer applications with 70% accuracy.
- 9.2 Given a word problem, the student will compute the area of a triangle with 70% accuracy.
- 9.3 Given two word problems the student will apply his knowledge of the area of a circle to find the solution with 70% accuracy.
- 9.4 Given a trapezoid and its dimensions the student will compute its accuracy with 70% accuracy.
- 9.5 Given three word problems involving varied consumer applications of volume, the student will find the volume with 70% accuracy.

## LAP 10.0 CONSUMER APPLICATIONS

- 10.1 Given two word problems dealing with automobile expenses the student will find miles per gallon, distance, rate and time with 70% accuracy.
- 10.2 Given four word problems on installment buying the student will compute credit charge, monthly payment and total cost with 70% accuracy.
- 10.3 Given two problems dealing with taxation, the student will find the sales tax due, and the budget given the mill levy and assessed valuation, with 70% accuracy.
- 10.4 Given two problems dealing with fire and life insurance the student will find the premium due, with 70% accuracy.

## BEHAVIORAL OBJECTIVES

## SLIDE RULE

## LAP 1.1 SCIENTIFIC NOTATION

Scientific Notation: Programed handbook and work sheet to be completed by student prior to taking test.

- 1.1 Given four problems the student will transform a number into notation & vice versa, with 70% accuracy.
- 1.2 Given two multiplication problems, the student will set up and solve them using notations, with 70% accuracy.
- 1.3 Given two division problems, the student will set up and solve the using notation, with 70% accuracy.
- 1.4 Given a problem combining the operations of multiplication and division, the student will set up and solve them using notation, with 70% accuracy.
- 1.5 Given a word problem, the student will select the appropriate operation and set up and solve it using notation, with 70% accuracy.

## LAP 2.0 MULTIPLICATION &amp; DIVISION

Slide Rule Multiplication and Division: Instruction manual page 3 - page 47. Test will be similar to Lap 1 only a slide rule must be used and tests will be timed. Suggestion: Do work sheet in lap 1 over using your slide rule and compare your answers.

- 2.1 Given six multiplication problems, the student will set them up in notation and find the product using the slide rule; with 70% accuracy.
- 2.2 Given six division problems, the student will set them up in notation and find the quotient using the slide rule; with 70% accuracy.
- 2.3 Given two problems requiring multiple operations of multiplication or division, the student will set them up using notation and find the solution using the slide rule; with 70% accuracy.
- 2.4 Given a word problem, the student will select the appropriate operations and find the solution using the slide rule; with 70% accuracy.

## LAP 3.0 SQUARES CUBES

- 3.1 Given four problems, the student will square or cube them using a slide rule, with 70% accuracy.
- 3.2 Given six problems the student will find the square or cube root using a slide rule; with 70% accuracy.
- 3.3 Given three problems, the student will use the CI Scale to compute the reciprocal; with 70% accuracy.
- 3.4 Given two problems, the student will first multiply them and then divide them using the CI Scale, with 70% accuracy.
- 3.5 Given five problems combining all the operation previously learned. ( $2 \times 3 = 6$ ,  $6 \div 3 = 2$ ,  $3^2 = 9$ ,  $9 \div 3 = 3$ ). The student will find the solution using the slide rule, with 70% accuracy.

INTRODUCTION TO OBJECTIVES FOR THE READING PROGRAM  
AT R-5 HIGH SCHOOL

The following is an attempt to seek the means by which objectives of R-5 can best be put into effect in the Reading Department. It is my hope that there will always be a great deal of additional insights mustered both as additions and as correctives to these.

1. Evaluation

Self-evaluation opportunities is an important aspect in the study of reading. Efforts are made to encourage each student in the following:

- a) An awareness of the objective.
- b) A self-evaluation of a student's own accomplishments in the light of his ability. Emphasis on teacher evaluation is softened to the extent that the student controls his own grade per nine weeks. My evaluations focus on specific reading disabilities that are observable through diagnostic testing and through suggestions of other staff members.

2. Skills and Concepts

Skills and concepts are not taught in themselves, but rather in relationship to present needs and problems immediate to each student's needs. No skill or concept is taught without the student experiencing the practical application of such.

Furthermore, no skills are imposed upon a student that are so steep that he is unable to generalize and able to use practical application of his own learning ability.

Most students are aware of their basic needs concerning reading. Many of them are simply non-readers, thus providing a class for these non-readers allows the opportunity for them to seek avenues of success in improving better reading habits.

### 3. Individual Exploration

Instruction is organized as to encourage and allow for individual exploration in reading. Each student starts a day by doing two lessons in McCall Crabs Standard Test Lessons in Reading, followed by one lesson in Learning Your Language. Strengthening comprehension skills are my goals from these type of instruction. Immediate reinforcement by self-evaluation of each lesson is guaranteed for the student. Individual studies include material selected by the instructor or by material selected by the student. My goal is for the student to develop a habit of reading rather it be from my selection or from his. Many times my selection will not appeal to his interests and he will need to seek his own material.

Both students and faculty members should be aware that errors are acceptable and natural outgrowth of the experience of learning. As such, errors should be viewed as useful and necessary adjuncts to learning and not as disgraceful or belittling to the individual himself. Students must learn to accept their errors as a natural outgrowth of learning from which much may be gained.

Providing the student thinks of mistakes as useful and not as belittling in any way, he may become a more willing explorer and experimenter in self-education.

### 4. Student Centered Learning

The teacher is one learning resource among many and the student is the learner. Therefore, the student, not the teacher, should be the center of the learning experience and should be the most direct participant in the learning process. There is, in fact, a sense in which teachers don't teach but learners learn. Teaching, in fact, may be thought of as being impossible without the participation of the learner. Therefore, the teacher's role ought to be to create situations and environments conducive to and encouraging of the learning process.

Such an environment is one in which the student is encouraged to work on his own in the application and trial of concepts and skills and in the discovery of new concepts and skills. Only when the student works on his own do the concepts and skills become real to him.



**BEHAVIORAL OBJECTIVES-SECONDARY READING.**

**1.0 READING SKILLS-READINESS FACTORS**

- 1.1 The student will be able to apply his experiential background.
- 1.2 The student will be able to utilize his language development.
- 1.3 The student will develop visual acuity and discrimination.
- 1.4 The student will develop auditory acuity and discrimination.

**2.0 READING SKILLS-RECOGNIZING AND UNDERSTANDING WORDS**

- 2.1 The student will be able to recognize the Dolch Basic Sight Word list.
- 2.2 The student will be able to understand compound words.
- 2.3 The student will be able to apply prefixes and suffixes to words.
- 2.4 The student will be able to identify root words.
- 2.5 The student will know all initial consonant sounds.
- 2.6 The student will be able to read all contractions.

**3.0 READING SKILLS-WORD MEANING**

- 3.1 The student will be able to provide many experiences to increase speaking and reading vocabulary.
- 3.2 The student will be able to select descriptive and figurative words and phrases.
- 3.3 The student will be able to supply synonyms, antonyms, and homonyms.

**4.0 READING SKILLS-WORD ANALYSIS-PHONIC ANALYSIS**

- 4.1 The student will be able to demonstrate phonic analysis.
- 4.2 The student will understand all initial consonant sounds.
- 4.3 The student will be able to demonstrate short and long vowel sounds.
- 4.4 The student will be able to understand blends.
- 4.5 The student will be able to apply digraphs and diphthongs.
- 4.6 The student will be able to apply accents to words.

## BEHAVIORAL OBJECTIVES-SECONDARY READING

## 5.0 READING SKILLS-WORD ANALYSIS-STRUCTURAL ANALYSIS

- 5.1 The student will be able to identify root words.
- 5.2 The student will be able to read compound words.
- 5.3 The student will be able to apply prefixes and suffixes to words.
- 5.4 The student will be able to understand syllables.
- 5.5 The student will be able to apply vowel rules.
- 5.6 The student will be able to apply possessive forms to words.
- 5.7 The student will be able to understand the use of a primary accent mark.
- 5.8 The student will know to accent the first syllable, unless it is a prefix, otherwise accent second syllable.

## 6.0 READING SKILLS-WORD ANALYSIS-DICTIONARY SKILLS

- 6.1 The student will be able to effectively use the dictionary in locating words
- 6.2 The student will be able to use the pronunciation key.
- 6.3 The student will be able to understand the proper definition.

## 7.0 READING SKILLS-RECOGNIZING AND UNDERSTANDING IDEAS-COMPREHENSION

- 7.1 The student will be able to find the main idea in the story.
- 7.2 The student will be able to keep events in proper sequence.
- 7.3 The student will be able to draw logical conclusions.
- 7.4 The student will be able to see relationships.
- 7.5 The student will be able to predict outcomes.
- 7.6 The student will be able to follow printed directions.
- 7.7 The student will be able to read for a definite purpose.
  - a) for pleasure
  - b) to obtain answers to questions
  - c) to obtain general idea of content.

## 7.0 READING SKILLS-RECOGNIZING AND UNDERSTANDING IDEAS-COMPREHENSION

7.8 The student will be able to classify items.

7.9 The student will be able to use the index.

## 8.0 READING SKILLS-COMPREHENSION-CRITICAL READING

8.1 The student will be able to understand if the material is fact or opinion.

8.2 The student will be able to appraise the author.

8.3 The student will be able to detect biased statements.

8.4 The student will be able to understand propaganda techniques.

8.5 The student will be able to draw comparisons.

8.6 The student will be able to test conclusions.

## 9.0 READING SKILLS-COMPREHENSION-CREATIVE READING

9.1 The student will be able to develop into a convergent reader.

9.2 The student will learn to be able to read divergently.  
(go beyond the author to new ideas)

## 10.0 READING SKILLS-COMPREHENSION-STUDY SKILLS

10.1 The student will be able to locate information.

10.2 The student will learn to select and evaluate material.

10.3 The student will be able to organize material.

10.4 The student will learn how to interpret maps and graphs.

10.5 The student will be able to effectively use SQ3R.

## 11.0 READING SKILLS-RATE OF COMPREHENSION

11.1 The student will be able to demonstrate flexibility.

11.2 The student will be able to skim and scan material.

11.3 The student will be able to demonstrate silent reading habits.

12.0 READING SKILLS-ORAL READING

- 12.1 The student will be able to demonstrate reading orally with a pleasing voice quality.
- 12.2 The student will be able to read with adequate volume.
- 12.3 The student will be able to read with clear and distinct enunciation.
- 12.4 The student will be able to read with accuracy in pronunciation.
- 12.5 The student will have the ability to convey the meaning to his listeners.
- 12.6 The student will learn proper eye-voice span.

BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE  
 PATHWAYS IN SCIENCE  
 1.0 Earth Science

- 1.1 The student will increase his scientific terminology by correctly defining 100 terms dealing with earth science.
- 1.2 The student will successfully complete 2 problems reading a barometer.
- 1.3 The student will successfully complete 4 problems reading a thermometer—centigrade and fahrenheit.
- 1.4 The student will successfully interpret in writing the following charts and/or pictures:

Solar system—pg. 4, fig. 4-2  
 Elements of the air—pg. 6, fig. 6-1  
 Composition of air—pg. 11, fig. 11-3  
 Layers of atmosphere—pg. 13, fig. 13-2  
 Crushed car—pg. 24, fig. 24-1  
 Plate to glass—pg. 25, fig. 25-3  
 Slanting of sun's rays—pg. 44, fig. 44-2  
 Unburnt Carbon—pg. 70, fig. 70-1  
 Fronts—pg. 97, fig. 97-1—97-3  
 Weather map shows—pg. 102, fig. 102-1  
 Land-water percentage—pg. 127, fig. 127-1  
 Topography of Ocean Floor—pg. 140, fig. 140-1  
 Form of a Wave—pg. 145, fig. 145-1

- 1.5 The student will name and describe the three types of rock.
- 1.6 The student will name and describe the four layers of the atmosphere.
- 1.7 The student will explain why airplane cabins are pressurized.
- 1.8 The student will explain the difference in the effect of straight and slanted rays from the sun.
- 1.9 The student will list and describe the three ways heat is transferred in our atmosphere.
- 1.10 The student will explain what causes air to move.
- 1.11 The student will differentiate between a cloud and fog.
- 1.12 The student will list the dangers of air pollution.
- 1.13 The student will list several pollution control devices for air pollution.
- 1.14 The student will list the elements of weather.
- 1.15 The student will explain the differences between a cold front, warm front, and stationary front.
- 1.16 The student will list six characteristics of a hurricane.

BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE  
1/0 Earth Science

- 1.17 The student will list four traits of a tornado.
- 1.18 The student will list safety precautions against storms.
- 1.19 The student will list five important "gifts" from the sea.
- 1.20 The student will list five occupations related to earth science.
- 1.21 The student will successfully complete 22 chapter assignment sheets—these include vocabulary words and questions. The student will take a comprehensive objective examination at the end of each (4) unit and will receive at least a seventy percent score before going onto the next unit.

THESE BEHAVIORIAL OBJECTIVES CAN AND WILL BE CHANGED TO FIT THE INDIVIDUAL STUDENT'S NEEDS.

BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE  
2.0 Chemistry

- 2.1 The student will increase his scientific terminology by correctly defining 75 terms dealing with chemistry.
- 2.2 The student will successfully complete 2 problems determining the volume of an object.
- 2.3 The student will list and describe the three phases of matter and give two examples of each.
- 2.4 The student will list the properties of metals and nonmetals.
- 2.5 The student will list five uses of metals.
- 2.6 The student will list five uses of nonmetal gases.
- 2.7 The student will explain the difference between a mixture and a compound.
- 2.8 The student will state the two simple rules for naming compounds.
- 2.9 The student will explain the function of the periodic chart.
- 2.10 The student will successfully complete 5 problems reading the periodic chart.
- 2.11 The student will successfully complete 3 problems dealing with the metric system of measurement.
- 2.12. The student will successfully complete 3 problems balancing a chemical equation.
- 2.13 The student will explain the importance of oxygen.
- 2.14 The student will explain the importance of carbon dioxide.
- 2.15 The student will explain the difference between chemical and physical changes and complete 10 problems dealing with these changes.
- 2.16 The student will explain the difference between the hard and soft water.
- 2.17 The student will list three occupations dealing with chemistry.
- 2.18 The student will describe matter in terms of atoms and molecules.
- 2.19 The student will successfully complete 2 problems dealing with atomic weights and atomic numbers.

BEHAVIORAL OBJECTIVES--VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE  
2.0 Chemistry

2.20 The student will successfully interpret in writing the following pictures and/or charts:

A balloon--pg. 21, fig. 21-2

An empty jar--pg. 28, fig. 24-1

Forms of water--pg. 28, fig. 28-1

Heat travels--pg. 44, fig. 44-1

Plants and animals--pg. 100, fig. 100-1

Atomic weights--pg. 162, fig. 162-1

2.21 The student will successfully complete thirty-one chapter assignment sheets--these will include vocabulary words and questions. The student will take a comprehensive objective examination at the end of each (4) unit and will receive at least a seventy percent score before going onto the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE CHANGED TO FIT THE INDIVIDUAL STUDENT'S NEEDS.



BEHAVIORAL OBJECTIVES--VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE

3.0 PHYSICS

- 3.1 The student will increase his scientific terminology by correctly defining 75 terms dealing with physics.
- 3.2 The student will differentiate between a series circuit and a parallel circuit.
- 3.3 The student will successfully complete 2 problems figuring voltage.
- 3.4 The student will differentiate between metals and nonmetals, as related to conductors and insulators.
- 3.5 The student will explain how the electric company measures how much electrical energy he uses in his home.
- 3.6 The student will successfully complete 2 problems figuring amperes.
- 3.7 The student will successfully complete 2 problems figuring kilowatt hours.
- 3.8 The student will successfully complete 2 problems figuring resistance.
- 3.9 The student will list ways of measuring resistance.
- 3.10 The student will explain how a compass works.
- 3.11 The student will list the two parts of the Law of Magnets.
- 3.12 The student will list four magnetic materials and four nonmagnetic materials.
- 3.13 The student will explain the domain theory.
- 3.14 The student will explain the difference between a permanent magnet and a temporary magnet.
- 3.15 The student will list four uses of the electromagnet.
- 3.16 The student will explain the difference between a step-down transformer and a step-up transformer.
- 3.17 The student will explain the difference between heat and temperature.
- 3.18 The student will explain how to measure temperature.
- 3.19 The student will successfully complete 1 problem changing fahrenheit temperature to centigrade degrees and centigrade degrees to fahrenheit degrees.
- 3.20 The student will successfully complete 2 problems figuring calories.
- 3.21 The student will list and explain the three methods of heat transfer.

BEHAVIORAL OBJECTIVES--VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE  
3.0 PHYSICS

3.22 The student will successfully complete in writing the following pictures and/or charts:

- A simple circuit--pg. 7, fig. 7-1
- Series circuit--pg. 19, fig. 19-2
- Parallel circuits--pg. 25, fig. 25-1
- Dials--pg. 27, fig. 27-1
- Voltage and amperage--pg. 31, fig. 31-1
- Conductor--pg. 31, fig. 31-2
- Brightness of the bulb--pg. 38, fig. 38-1
- Map of the magnetic field--pg. 77, fig. 77-2
- Electromagnet--pg. 93, fig. 93-2
- Heating metal--pg. 130, fig. 130-1
- Compound bar--pg. 131, fig. 131-2
- Colored water--pg. 140, fig. 140-1
- Wax rings--pg. 152, fig. 152-1

3.23 The student will list three occupations involved with physics.

3.24 The student will successfully complete twenty-eight chapter assignment sheets. (assignment sheets include vocabulary words and questions.) The student will take a comprehensive objective examination at the end of each (4) unit and will receive a score of at least seventy percent before going on to the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE CHANGED TO FIT THE INDIVIDUAL STUDENT'S NEEDS.

BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE  
PATHWAYS IN SCIENCE

## 4.0 BIOLOGY

- 4.1 The student will increase his scientific terminology by correctly defining 100 terms dealing with biology.
- 4.2 The student will list the four general needs of living things.
- 4.3 The student will state in writing five characteristics of a cell.
- 4.4 The student will differentiate between protoplasm, cells, tissues, organs, and systems.
- 4.5 The student will state in writing five types of tissues and their functions.
- 4.6 The student will diagram the major parts of the digestive system and give their function.
- 4.7 The student will name the four types of teeth and their function.
- 4.8 The student will state in writing the five functions of the blood.
- 4.9 The student will explain the use of protein, carbohydrates, and fats in the body.
- 4.10 The student will list two professions involved with biology.
- 4.11 The student will name and describe the three types of blood cells.
- 4.12 The student will show in a diagram the four steps involved in respiration.
- 4.13 The student will state in writing the four functions of the skin.
- 4.14 The student will diagram the parts of the heart and give their function.
- 4.15 The student will describe the lungs and give their function.
- 4.16 The student will state in writing the five steps involved in fighting germ diseases.
- 4.17 The student will state in writing 10 diseases, their cause(s) and the way they spread.
- 4.18 The student will diagram the path of sound from the outside to the brain.
- 4.19 The student will diagram the parts of the eye and give the function of each part.
- 4.20 The student will name the parts of the brain and give the function of each part.

4.21 The student will successfully interpret in writing the following charts and/or pictures:

- Swallow an apple--pg. 30, fig. 30-1
- Number of teeth--pg. 34, fig. 34-1
- Villi--pg. 46, fig. 46-1
- Label--pg. 48, fig. 48-1, 48-2.
- Air in and out--pg. 79, fig. 79-1
- Chest Cavity size--pg. 80, fig. 80-2
- Label--pg. 88, fig. 88-1
- Bacteria--pg. 117, fig. 117-1
- Behavior of living things--pg. 140, fig. 140-1
- Label--pg. 161, fig. 161-1

4.22 The student will successfully complete twenty-eight chapter assignment sheets (assignment sheets include questions and vocabulary words). The student will take a comprehensive objective examination at the end of each (5) unit and will receive a score of at least seventy percent before going onto the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE CHANGED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.

BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE  
1.0 HIGH SCHOOL BIOLOGY

- 1.1 The student will increase his scientific terminology by correctly defining 250 terms dealing with biology.
- 1.2 The student will develop and diagram a food web up through a third-order consumer.
- 1.3 The student will describe and give the importance for each of the following cycles: carbon, water and calcium.
- 1.4 The student will know and demonstrate the proper use of the microscope through actual practice and teacher-made tests.
- 1.5 The student will name and describe the four population determiners.
- 1.6 The student will list the abiotic factors included in weather.
- 1.7 The student will list three generalizations that can be made about population steady state.
- 1.8 The student will describe each of the following relationships: predation, parasitism, commensalism, mutualism, competition.
- 1.9 The student will successfully learn the basic nomenclature of the Plant Kingdom, the Animal Kingdom, and The Protist Kingdom and demonstrate this on a teacher-made test.
- 1.10 The student will do an investigation comparing characteristics of several animals and placing these animals in the correct classification level.
- 1.11 The student will list two characteristics of each of the following animals: chordates, mammals, birds, reptiles, amphibians, fishes, arthropods, annelids, mollusks, echinoderms, "worms", coelenterates, and sponges.
- 1.12 The student will list two characteristics for each of the following plants: tracheophytes, angiosperms; gymnosperms, ferns, bryophytes, fungi, algae, and lichens.
- 1.13 The student will list three characteristics for monocotyledons and dicotyledons.
- 1.14 The student will label the parts of a flower and give the function of each part.
- 1.15 The student will give two traits for each of the following: bacteria, blue-green algae, flagellates, amebas, ciliates, sporozoans, slime molds, and viruses.
- 1.16 The student will list and describe the five types of diseases (general).
- 1.17 The student will describe the nitrogen cycle.

## BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE

## 1.0 HIGH SCHOOL BIOLOGY

- 1.18 The student will list two characteristics for each of the following biomes: tundra, taiga, middle-latitude deciduous forest, tropical rain forest, middle-latitude grassland, middle-latitude desert, tropical deciduous forest, savanna, middle-latitude rain forest, chaparral.
- 1.19 The student will give three characteristics for each of the following water ecosystems: ponds, lakes, flowing-water and the oceans (open sea, the great depths, and the coastal waters).
- 1.20 The student will list two characteristics for each of the following paleoecosystems: Cambrian, Carboniferous, Triassic, Eocene.
- 1.21. The student will label a diagram of the cell and give the function of each part.
- 1.22 The student will name the three main parts of the cell theory.
- 1.23 The student will list and describe the steps of mitosis.
- 1.24 The student will list the three conditions (or materials) necessary for photosynthesis.
- 1.25 The student will describe leaves—structure and function.
- 1.26 The student will describe roots—structure and function.
- 1.27 The student will describe stems—structure and function.
- 1.28 The student will explain chemical and physical digestion.
- 1.29 The student will describe arteries, veins and capillaries.
- 1.30 The student will list the blood cells and describe their functions.
- 1.31 The student will describe a mammalian kidney.
- 1.32 The student will describe the kinds of nervous systems.
- 1.33 The student will name the three main functions of the skeleton.
- 1.34 The student will describe the following types of reproduction: asexual, sexual, spontaneous generation, fission, budding.
- 1.35 The student will describe the female menstrual cycle.
- 1.36 The student will successfully complete four problems on crossing blood types.
- 1.37 The student will successfully complete one problem with dihybrid crosses.
- 1.38 The student will list six of Mendel's conclusions regarding heredity.

BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE  
1.0 HIGH SCHOOL BIOLOGY

- 1.39 The student will list the four characteristics of the evolutionary process.
- 1.40 The student will name three mechanisms of isolation.
- 1.41 The student will name the four "races".
- 1.42 The student will list several major medical breakthroughs in reducing infectious diseases.
- 1.43 The student will explain the difference between renewable and non-renewable resources. He will give two examples of each and explain the problems involved with both.
- 1.44 The student will list the dangers and uses of pesticides:
- 1.45 The student will successfully interpret in writing the following pictures and/or charts:
- Two ponderosa pines—pg. 50, fig. 2-11
  - North-facing slopes—pg. 51, fig. 2-12
  - Lion at its kill—pg. 83, fig. 3-9
  - Parasites—pg. 86, fig. 3-11
  - Interrelationships—pg. 90, fig. 3-17
  - Transmission of malaria—pg. 223, fig. 7-5
  - Walking housefly—pg. 224, fig. 7-6
  - Humus—pg. 236, fig. 7-14
  - Varying hare—pg. 689, fig. 18-10
- 1.46 The student will successfully complete twenty chapter assignment sheets—these include questions and vocabulary words. At the end of each (6) section, the student will take a comprehensive objective examination and will receive at least a seventy percent score before going onto the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT THE INDIVIDUAL STUDENT'S NEEDS.

BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE  
1.0 FUNDAMENTALS OF APPLIED PHYSICS

- 1.1 The student will increase his scientific terminology by correctly defining 150 terms dealing with basic physics.
- 1.2 The student will list the five basic steps in the scientific method.
- 1.3 The student will successfully complete one problem computing the density of an object.
- 1.4 The student will successfully complete one problem determining the porosity of an object.
- 1.5 The student will successfully complete one problem determining the inertia of an object.
- 1.6 The student will successfully complete one problem determining the malleability of an object.
- 1.7 The student will successfully complete one problem determining the ductility of an object.
- 1.8 The student will successfully complete one problem determining the cohesion and adhesion of a liquid.
- 1.9 The student will list and describe the three phases of matter.
- 1.10 The student will successfully complete one problem determining the surface tension of a liquid.
- 1.11 The student will successfully complete one problem determining the capillary action of a liquid.
- 1.12 The student will successfully complete three problems determining specific gravity.
- 1.13 The student will successfully complete one problem determining that gas has weight.
- 1.14 The student will successfully complete twenty-five problems using metric measurement.
- 1.15 The student will successfully complete five problems figuring the volume of cubes, rectangles, and cylinders.
- 1.16 The student will successfully complete two problems converting volume measure to liquid measure.
- 1.17 The student will successfully complete two problems figuring the area of a rectangle and a circle.
- 1.18 The student will successfully complete four problems figuring horsepower (HP).
- 1.19 The student will successfully complete one problem figuring the efficiency of a machine.



## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 FUNDAMENTALS OF APPLIED PHYSICS

- 1.20 The student will successfully complete two problems figuring airplane speed and time needed to travel  $x$  distance.
- 1.21 The student will successfully complete three problems computing the average speed of an object (average speed = initial speed + final speed divided by 2).
- 1.22 The student will successfully complete three problems figuring final speed ( $S_F = (A)(T) + S_1$ ).
- 1.23 The student will successfully complete six problems figuring distance covered by an object rolling down an inclined surface ( $D = (d)(t^2)$ ).
- 1.24 The student will successfully complete two problems figuring mechanical advantage of speed ( $MA_S$ ).
- 1.25 The student will successfully complete two problems figuring mechanical advantage of force ( $MA_F$ ).
- 1.26 The student will explain Newton's three basic Laws of Motion.
- 1.27 The student will list the three types of motion.
- 1.28 The student will explain the difference between and the application of centripetal and centrifugal force.
- 1.29 The student will diagram and label a class one, class two and class three lever. The student will explain the difference between each class of lever.
- 1.30 The student will successfully complete three problems dealing with the mechanical advantage of levers—force, speed and/or movement.
- 1.31 The student will successfully complete three problems figuring forces or distance required to do work on an inclined plane (mechanical advantage of force and distance).
- 1.32 The student will explain the difference between an inclined plane and a wedge.
- 1.33 The student will successfully complete three problems figuring the resistance for specified cams.
- 1.34 The student will successfully compute four problems figuring the  $MA_S$  for pulley combinations.
- 1.35 The student will successfully complete four problems determining the load that can be raised by elevating screw combinations (pitch, circumference).
- 1.36 The student will list the functions of a screw thread.
- 1.37 The student will successfully complete two problems figuring direction of rotation in a gear train and computing the ratio of speed between the driver and driven gear.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 FUNDAMENTALS OF APPLIED PHYSICS

- 1.38 The student will list the functions of a simple gear train.
- 1.39 The student will list the functions of a worm and worm wheel.
- 1.40 The student will successfully complete one problem determining dimensions and force in a given sketch of a hoisting derrick.
- 1.41 The student will successfully complete 2 problems computing the brake horsepower of an engine using the "Prony brake" formula:

$$HP = (F_1 - F_2) \frac{\left(\frac{22}{7} \times \text{diameter}\right) (RPM)}{12''}$$

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33,000 foot pounds

- 1.42 The student will name and describe the three types of friction and how each can be overcome.
- 1.43 The student will list three conditions that a lubricant must meet.
- 1.44 The student will successfully complete three problems determining the sliding friction of specified combinations.
- 1.45 The student will successfully complete two problems determining the weights of given liquids.
- 1.46 The student will explain Pascal's Law, Boyle's Gas Laws and Bernoulli's Principle.
- 1.47 The student will successfully complete three problems computing the force on the bottom of given containers and the pressure in each case per square foot.
- 1.48 The student will successfully complete eighteen chapter assignment sheets. At the end of each quarter's work (4), the student will take a comprehensive objective examination and pass it with at least a seventy percent score before going onto the next unit.

THESE BEHAVIORIAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.

## BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Modern Physical Science

- 1.1 The student will increase his scientific terminology by correctly defining 300 terms dealing with physical science.
- 1.2 The student will describe matter in terms of atoms and molecules.
- 1.3 The student will give characteristics for each of the following: electrolytes, ions, acids, bases and salts.
- 1.4 The student will explain the difference between a metal and non-metal and give two examples of each.
- 1.5 The student will list several properties of water.
- 1.6 The student will explain the difference between organic matter and inorganic matter.
- 1.7 The student will explain the difference between hard and soft water.
- 1.8 The student will describe several chemicals used in cleaning—soaps, detergents, carbon tetrachloride.
- 1.9 The student will list several uses and dangers of drugs.
- 1.10 The student will list and describe several materials used for building.
- 1.11 The student will name and describe and give two examples of the two general classifications of plastic.
- 1.12 The student will name, describe and give two examples of textiles—wool, cotton, silk, linen, paper, synthetic fibers.
- 1.13 The student will list the function (s) for each of the following: chlorine, sulfur dioxide, hydrogen peroxide.
- 1.14 The student will explain the natures of dyes.
- 1.15 The student will describe petroleum—its origin and uses.
- 1.16 The student will explain how a blast furnace operates.
- 1.17 The student will describe (characteristics and uses) for each of the following: pig iron, steel, wrought iron, stainless steel, sterling silver, aluminum, copper, tin, lead, zinc, gold, silver, platinum.
- 1.18 The student will name and describe precious metals.
- 1.19 The student will describe and name alloys.
- 1.20 The student will name several frictional forces.
- 1.21 The student will define a machine and give several examples.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Modern Physical Science

- 1.22 The student will explain Newton's three laws of motion.
- 1.23 The student will list several properties of matter.
- 1.24 The student will explain Pascal's law and give an example.
- 1.25 The student will explain Archimede's principle.
- 1.26 The student will list seven reasons why dams are designed and built as they are.
- 1.27 The student will explain the law of the conservation of energy.
- 1.28 The student will explain the difference between a diesel engine and a gasoline engine.
- 1.29 The student will explain the difference between heat and temperature.
- 1.30 The student will list the four ways heat is produced through conversion of other forms of energy.
- 1.31 The student will state several differences between solids, liquids, and gases.
- 1.32 The student will list and explain the three ways heat is transferred.
- 1.33 The student will describe fuel and give several examples.
- 1.34 The student will explain how sound waves pass through matter.
- 1.35 The student will explain what determines the pitch of a sound and the loudness of a sound.
- 1.36 The student will explain the Doppler effect.
- 1.37 The student will describe light—how it is produced, where it comes from, how it is polarized, how it is measured, speed,
- 1.38 The student will describe refraction—cause and importance.
- 1.39 The student will describe color—what it is, what gives an object color, what are the primary colors, what are the complementary colors.
- 1.40 The student will explain how electricity is produced.
- 1.41 The student will explain how electric power is measured.
- 1.42 The student will explain the difference between a series circuit and a parallel circuit.
- 1.43 The student will explain magnetism.
- 1.44 The student will list the four areas involved in a study of electronics.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Modern Physical Science

- 1.45 The student will explain what causes lightning.
- 1.46 The student will explain how a radio and television work.
- 1.47 The student will list several uses of radar.
- 1.48 The student will list and describe the three main divisions of the earth.
- 1.49 The student will explain the theories of the earth's origin and how old it is.
- 1.50 The student will list, describe and give two examples of the three classes of rock.
- 1.51 The student will describe the oceans—size, ocean floor, salinity, raw materials, life (plant and animal), waves, currents, tides.
- 1.52 The student will explain the importance of soil conservation.
- 1.53 The student will describe weather and climate. The student will list factors that control weather and climate.
- 1.54 The student will list the uses of the atmosphere.
- 1.55 The student will explain where the water of the air comes from.
- 1.56 The student will list and describe the types of clouds.
- 1.57 The student will describe air masses and fronts.
- 1.58 The student will describe the earth. The student will describe time and how it is determined.
- 1.59 The student will describe the moon and its importance.
- 1.60 The student will describe the solar system.
- 1.61 The student will describe the instruments used in aircrafts.
- 1.62 The student will explain how gravity affects space flight.
- 1.63 The student will explain how communication satellites operate.
- 1.64 The student will successfully complete fourteen chapter assignment sheets—these include vocabulary words and questions. At the end of each quarter's work (4), there will be a comprehensive objective examination. The student must receive at least a seventy percent score before going to the next unit.

THESE BEHAVIORIAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Earth; Its Changing Form

- 1.1 The student will increase his scientific terminology by correctly defining 300 terms dealing with "nonliving" earth science.
- 1.2 The student will describe matter in terms of atoms and molecules.
- 1.3 The student will describe a chemical change and a physical change and give an example of each.
- 1.4 The student will describe a metal and a nonmetal and give an example of each.
- 1.5 The student will discuss the characteristics of minerals—shape, structure and function.
- 1.6 The student will name the three types of rock and give an example of each.
- 1.7 The student will describe the lithosphere, hydrosphere, and the atmosphere.
- 1.8 The student will describe the basic properties of the earth's interior and its relationship to surface phenomena and features.
- 1.9 The student will discuss the influence of the earth's rotation and gravitation, and moon's gravitation on the formation of tides.
- 1.10 The student will discuss the earth's resources in terms of man's needs and give examples of how an individual can help conserve these resources.
- 1.11 The student will name and describe the four types of clouds.
- 1.12 The student will describe and give examples of the water cycle.
- 1.13 The student will describe weather and relate how local conditions (location, topography, altitude, etc.) will influence local weather.
- 1.14 The student will relate weather to climate.
- 1.15 The student will relate weathering, erosion, and mountain building to the earth's observable topographical features.
- 1.16 The student will describe six methods of preventing and/or controlling erosion.
- 1.17 The student will list and describe the physical changes and chemical changes that shape(d) the patterns of the earth's land forms.
- 1.18 The student will discuss the concept that the earth is in constant change.
- 1.19 The student will discuss the several theories about how mountains are built and how volcanoes, ocean basins, and continents are formed.

## 1.0 The Earth: Its Changing Form

- 1.20 The student will describe how fossils give clues to life in the earth's past.
- 1.21 The student will demonstrate a familiarity with the earth's calendar of events (geological time scale).
- 1.22 The student will name and describe the four types of solid fossil fuel.
- 1.23 The student will list the methods for removing gangue (waste) minerals from the mined ore.
- 1.24 The student will list and describe the four major types of iron-refining furnaces used in the production of steel.
- 1.25 The student will list and describe various types of steel.
- 1.26 The student will describe five methods of obtaining fresh water from salt water.
- 1.27 The student will describe several sources of energy.
- 1.28 The student will list three results of a fuel burning.
- 1.29 The student will list the three safety rules for fuels.
- 1.30 The student will explain the difference between heat and temperature.
- 1.31 The student will explain Brownian motion (movement).
- 1.32 The student will explain how the carburetor of a gasoline engine operates.
- 1.33 The student will name six facts about magnets.
- 1.34 The student will list several characteristics of a nuclear explosion.
- 1.35 The student will list methods of measuring and detecting radioactivity.
- 1.36 The student will name and describe the nine planets.
- 1.37 The student will describe the Doppler effect.
- 1.38 The student will describe a telescope and give two of its main functions.
- 1.39 The student will name four ways to compare stars.
- 1.40 The student will list Newton's Three Law of Motion.
- 1.41 The student will list the three main goals of an unmanned exploration.
- 1.42 The student will list several functions of weather satellites.

BEHAVIORAL OBJECTIVES--VOCATIONAL SCIENCE

1.0 The Earth: Its Changing Form

- 1.43 The student will list six basic qualifications necessary for an astronaut.
- 1.44 The student will list four future projects of space exploration.
- 1.45 The student will successfully complete twenty-one chapter assignment sheets. These will include vocabulary words and questions. At the end of each (8) unit, the student will take a comprehensive objective examination and must receive at least a seventy percent score before going onto the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.



## BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE

## 1.0 The Earth: Its Living Things

- 1.1 The student will increase his scientific terminology by correctly defining 300 terms dealing with the earth and its living things.
- 1.2 The student will list and describe the basic activities of life.
- 1.3 The student will name and describe the basic parts of a cell--plant and animal.
- 1.4 The student will list the two characteristics of living things.
- 1.5 The student will explain the difference between work and energy.
- 1.6 The student will describe carbohydrates, fats and proteins--structure and function.
- 1.7 The student will list the limiting factors in a plant and animal's environment.
- 1.8 The student will describe a food chain and a food web.
- 1.9 The student will explain the importance of photosynthesis.
- 1.10 The student will describe leaves--structure and function.
- 1.11 The student will describe roots--structure and function.
- 1.12 The student will describe the cell energy process.
- 1.13 The student will describe bacteria--structure, reproduction, uses.
- 1.14 The student will describe fungi.
- 1.15 The student will describe algae.
- 1.16 The student will describe mosses.
- 1.17 The student will name and describe the two plant subkingdoms.
- 1.18 The student will describe ferns.
- 1.19 The student will describe nonwoody seed plants--grasses.
- 1.20 The student will explain the difference between monocots and dicots.
- 1.21 The student will list the four ways pollen is carried.
- 1.22 The student will describe woody seed plants--vines, shrubs and trees.
- 1.23 The student will list three reasons why the tree needs water for all its life processes.
- 1.24 The student will list three functions of the skeleton.
- 1.25 The student will discuss classification--likenesses and differences.

## BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE

## 1.0 The Earth: Its Living Things

- 1.26 The student will list the steps of classification--from general to specific.
- 1.27 The student will describe single-celled organisms--protozoans. The student will list five things a protozoan must do in order to live.
- 1.28 The student will describe simple many-celled animals--sponges, corals and jellyfish.
- 1.29 The student will describe the simple worms--flatworms, roundworms.
- 1.30 The student will describe the spiny-skinned animals.
- 1.31 The student will describe segmented worms.
- 1.32 The student will describe arthropods--characteristics and classification.
- 1.33 The student will describe animals with stony shells.
- 1.34 The student will describe vertebrates--vertebrates of the water, cold-blooded vertebrates (land), vertebrates with feathers, and mammals.
- 1.35 The student will explain what causes seasons and the effects of seasons on living things.
- 1.36 The student will describe the two general categories of forest environments.
- 1.37 The student will list four properties of water.
- 1.38 The student will list and describe nine types of plant-eating animals.
- 1.39 The student will list the seven environmental factors that affect populations.
- 1.40 The student will describe the following systems: skeletal, muscular, digestive, circulatory, nervous, respiratory, endocrine.
- 1.41 The student will list the two sources for all foods.
- 1.42 The student will give the function for each of the following: carbohydrates, fats and oils, proteins, minerals, water and vitamins.
- 1.43 The student will explain the interaction of heredity and the environment.
- 1.44 The student will explain the ways to develop a habit and ways to break a habit.
- 1.45 The student will explain the adaptation of organisms over the ages.

## BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Earth: Its Living Things

- 1.46 The student will explain how man has improved plants and their environment and animals and their environment.
- 1.47 The student will explain the need for conservation.
- 1.48 The student will list and describe four problems involved with the future of man's communities.
- 1.49 The student will list several requirements for space travel.
- 1.50 The student will successfully complete twenty-two chapter assignment sheets (these include vocabulary words and questions). At the end of each unit (8), the student will take a comprehensive objective examination. The student must have at least a seventy percent score on the examination before going onto the next unit.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Physical World

- 1.1 The student will increase his scientific terminology by correctly defining 300 terms dealing with the physical world.
- 1.2 The student will explain the evidence that the earth rotates.
- 1.3 The student will list the characteristics of gravity (or gravitational pull).
- 1.4 The student will name several fields.
- 1.5 The student will describe the Van Allen radiation belts.
- 1.6 The student will describe the topography of the earth.
- 1.7 The student will describe the lithosphere, the hydrosphere, and the atmosphere.
- 1.8 The student will describe the ocean bottom.
- 1.9 The student will name the two most common gases of the atmosphere.
- 1.10 The student will distinguish between weathering and erosion.
- 1.11 The student will describe work and give several examples.
- 1.12 The student will list the four types of sedimentary rocks.
- 1.13 The student will describe potential energy and give two examples.
- 1.14 The student will describe kinetic energy and give two examples.
- 1.15 The student will describe a hypothesis of the origin of the Ice Age.
- 1.16 The student will name and describe the four types of mountains.
- 1.17 The student will name several minerals commonly found in rock.
- 1.18 The student will differentiate between a rock and a mineral.
- 1.19 The student will explain how an earthquake occurs.
- 1.20 The student will explain why radioactivity is the most reliable tool for estimating the age of rocks.
- 1.21 The student will discuss what can be learned from the study of fossils.
- 1.22 The student will list some evidences for continental drift.
- 1.23 The student will explain the difference between an atom and a molecule.
- 1.24 The student will explain the difference between an element and a compound.

## BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Physical World

- 1.25 The student will explain how the forces between molecules differ in gases, liquids, and solids.
- 1.26 The student will explain how the soil holds water.
- 1.27 The student will explain why air exerts pressure on its surroundings.
- 1.28 The student will explain how atoms of different elements differ.
- 1.29 The student will explain why two atoms cannot be pushed together.
- 1.30 The student will make a diagram of an atom with 6 protons, 6 neutrons, and 6 electrons; an atom with an atomic number of 10 and atomic weight of 19; an atom with 7 electrons and 8 neutrons.
- 1.31 The student will explain the law of attraction and repulsion between charged particles.
- 1.32 The student will name six examples of a chemical reaction.
- 1.33 The student will explain the difference between a mixture and a compound.
- 1.34 The student will describe two composition reactions, two decomposition reactions, and two displacement reactions.
- 1.35 The student will give two examples of physical changes and two examples of chemical changes that take place constantly in nature.
- 1.36 The student will state the Periodic Law and explain its application.
- 1.37 The student will explain why inert gases cannot combine with other atoms under ordinary circumstances.
- 1.38 The student will explain the difference between an ionic bond and a covalent bond.
- 1.39 The student will explain on what features of an atom its chemical activity depends.
- 1.40 The student will describe metals and nonmetals—common physical properties and common atomic structures.
- 1.41 The student will name three uses of sulfuric acid.
- 1.42 The student will give four examples of our dependence on nitrogen.
- 1.43 The student will list daily uses of salt.
- 1.44 The student will explain how paper and soap is made.
- 1.45 The student will explain how gasoline is prepared.
- 1.46 The student will name three alloys found in the home.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Physical World

- 1.47 The student will describe fusion and fission.
- 1.48 The student will explain how the chain reaction in a reactor is kept under control.
- 1.49 The student will list some advantages and disadvantages of fusion power.
- 1.50 The student will name two examples of isotopes that can be man made.
- 1.51 The student will list some uses of gamma radiation.
- 1.52 The student will describe a "tracer" and list several uses.
- 1.53 The student will name six forms of energy.
- 1.54 The student will explain the law of the conservation of energy.
- 1.55 The student will differentiate between heat and temperature.
- 1.56 The student will explain why it is better to wear light colored clothes rather than dark colored clothes in the summer.
- 1.57 The student will explain how relative humidity is measured.
- 1.58 The student will describe the history of a thunderstorm.
- 1.59 The student will explain why a machine cannot reach 100 percent efficiency.
- 1.60 The student will work three problems figuring mechanical advantage.
- 1.61 The student will explain why it is important for us to conserve our world's supply of coal, petroleum, natural gas and water.
- 1.62 The student will describe the following: rocket engines, diesel engines, internal-combustion engines, jet engines.
- 1.63 The student will explain why the invention of the self-starter made women drivers.
- 1.64 The student will tell how fast sound travels.
- 1.65 The student will describe Saturn.
- 1.66 The student will list six facts known about magnets and magnetism in Benjamin Franklin's time.
- 1.67 The student will explain the difference between a cell and a battery.
- 1.68 The student will draw a diagram to explain how a simple motor works.
- 1.69 The student will draw a diagram to show how a generator works.
- 1.70 The student will draw a diagram to show how a transformer works.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Physical World

- 1.71 The student will state and explain Ohm's Law.
- 1.72 The student will explain refraction, reflection and absorption of light.
- 1.73 The student will explain how a lens works—camera and eye.
- 1.74 The student will explain the use of rods and cones in the eye.
- 1.75 The student will explain the difference between farsightedness and nearsightedness and how both are and can be treated.
- 1.76 The student will describe what happens to the size of an object, and the location of an image as you bring it closer and closer to the lens.
- 1.77 The student will name several uses of bright-line spectra.
- 1.78 The student will define color.
- 1.79 The student will name several uses of photoelectric effect.
- 1.80 The student will explain how an atom emits light.
- 1.81 The student will explain Bohr's theory.
- 1.82 The student will name in order all the various kinds of rays beginning with those of long wavelength.
- 1.83 The student will name three sources of radio waves from outside the earth.
- 1.84 The student will explain the mechanism that creates ultraviolet rays and X-rays.
- 1.85 The student will list the kinds of waves given out by the sun and the ones that reach the earth through the atmosphere.
- 1.86 The student will explain how sound waves are used by ships for measuring the depth of the water beneath them.
- 1.87 The student will show how sound waves are used to help locate underground oil deposits.
- 1.88 The student will explain how sounds of different pitch and different quality are produced by the same human voice.
- 1.89 The student will explain how it is possible for a common cold to spread to your ears and infect them.
- 1.90 The student will explain how each of the following operates: telegraph, telephone receiver, telephone transmitter, loudspeaker.
- 1.91 The student will explain the steps by which your radio set singles out one radio station you want to hear and turns its message into sound waves (also television).

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 The Physical World

1.92 The student will explain how a radar set operates and its function.

1.93 The student will explain how to recognize a planet.

1.94 The student will name Kepler's three laws.

1.95 The student will define a light year.

1.96 The student will state the distance to the nearest star and explain how it is measured.

1.97 The student will list the radiations cut off by the earth's atmosphere.

1.98 The student will list some major problems in launching a space vehicle.

1.99 The student will describe some major problems that had to be solved before men could travel in space.

1.100 The student will describe the origin of the sun's great energy output.

1.101 The student will describe stars—shape, size, temperature, distances, sources of energy, life cycle.

1.102 The student will successfully complete assignment sheets for eight out of ten units—these will include vocabulary words and questions. At the end of each (8) unit, the student will take a comprehensive examination and receive at least a seventy per cent score before going onto the next unit.

THESE BEHAVIORIAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT EACH INDIVIDUAL STUDENT'S NEEDS.



## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Your Health and Safety in a Changing Environment

- 1.1 The student will increase his scientific terminology by correctly defining 200 terms dealing with health and safety.
- 1.2 The student will explain what is meant by "symbols of health" and give two examples from his own experience.
- 1.3 The student will explain in his own words why good all-around health is necessary to being a good employee and a good student.
- 1.4 The student will describe tissue and list five types found in his body.
- 1.5 The student will list three functions of the skeleton.
- 1.6 The student will list the nine systems of the body and how they function together.
- 1.7 The student will explain why he must eat and the five types of nutrients needed.
- 1.8 The student will name the vitamins the body needs and why they are needed (deficiencies cause what?).
- 1.9 The student will explain how his choice of foods affects his school work, his appearance and his job performance.
- 1.10 The student will list some common foods to which people are allergic.
- 1.11 The student will list the six water pollutants.
- 1.12 The student will list the seven steps to achieving good physical fitness.
- 1.13 The student will list the irritants in air pollution that may affect his health and his property.
- 1.14 The student will list the main functions of bones, how they grow and how they repair themselves.
- 1.15 The student will explain why good posture is important.
- 1.16 The student will explain several causes of present-day tension and list what dangers may arise from prolonged tension.
- 1.17 The student will list several ways of overcoming fatigue.
- 1.18 The student will list six main functions of the skin.
- 1.19 The student will name and give the functions of the four types of teeth.
- 1.20 The student will list the causes of caries and how they can be prevented.

## BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Your Health and Safety in a Changing Environment

- 1.21 The student will explain how his appearance can affect his job possibilities.
- 1.22 The student will explain how sports and/or good exercise contribute to his physical and social growth.
- 1.23 The student will list some common symptoms of eye trouble and list seven of the fourteen ways to protect his eyes.
- 1.24 The student will explain why good hearing is a valuable asset.
- 1.25 The student will name the four tastes recognized by the taste buds.
- 1.26 The student will name the odors to which his sense of smell normally responds.
- 1.27 The student will explain the difference between normal and chronic fatigue.
- 1.28 The student will describe nerves and how they function.
- 1.29 The student will explain the importance of sleep.
- 1.30 The student will describe a cell—its structures and their functions.
- 1.31 The student will describe the digestive system—structures and functions.
- 1.32 The student will explain how digested foods get into the blood.
- 1.33 The student will list several reasons why smoking is harmful to the respiratory system.
- 1.34 The student will list the four types of blood.
- 1.35 The student will describe (structure and function), for each of the following: red blood cells, white blood cells, platelets.
- 1.36 The student will describe the respiratory system—structures and functions.
- 1.37 The student will list important substances carried by the blood to every part of the body.
- 1.38 The student will list four things to do for bites and/or stings.
- 1.39 The student will describe the heart—structure, function of the chambers and valves.
- 1.40 The student will list and describe the three types of blood vessels.
- 1.41 The student will list five functions of the liver and three disorders.
- 1.42 The student will list three functions of the kidneys and three disorders.

## BEHAVIORIAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Your Health and Safety in a Changing Environment

- 1.43 The student will name some feedback systems in his body—negative and positive.
- 1.44 The student will list three ways the body is cooled and three ways the body is warmed.
- 1.45 The student will discuss biological hereditary—gene, chromosomes, DNA.
- 1.46 The student will list some causes of mental retardation.
- 1.47 The student will list the seven stages of life and describe each.
- 1.48 The student will discuss the regulators of growth and development in the human body.
- 1.49 The student will name the glands that affect male and female body characteristics.
- 1.50 The student will explain personality—its meaning and how it is developed.
- 1.51 The student will discuss some effects of divorce and remarriage.
- 1.52 The student will define behavior—conscious and subconscious, individual and group.
- 1.53 The student will name and describe eight defense mechanisms.
- 1.54 The student will explain how hereditary and environmental factors affect his capacity to learn.
- 1.55 The student will list seven ways to develop good and effective study habits.
- 1.56 The student will explain the three principal influences on individual emotional development.
- 1.57 The student will explain what body systems play a major role in emotional states.
- 1.58 The student will list five problems that might arise in a teenage marriage.
- 1.59 The student will distinguish between short-range and long-range goals.
- 1.60 The student will describe the troubled personality—neurotic and psychotic.
- 1.61 The student will list eight ways the mentally ill can be helped.
- 1.62 The student will list the five ways disease germs enter the body.

## BEHAVIORAL OBJECTIVES—VOCATIONAL SCIENCE

## 1.0 Your Health and Safety in a Changing Environment

- 1.63 The student will list several diseases—their cause and effects.
- 1.64 The student will explain how antibodies combat infection.
- 1.65 The student will explain the body's defenses against invading micro-organisms.
- 1.66 The student will list five functions of the Public Health Service.
- 1.67 The student will list several health careers.
- 1.68 The student will list the leading causes of death in the United States.
- 1.69 The student will list the "seven danger signals."
- 1.70 The student will list the diseases of the heart—development and effect.
- 1.71 The student will describe alcoholism—cause, effects and treatment.
- 1.72 The student will list several reasons for smoking.
- 1.73 The student will discuss the effects of smoking on the respiratory system, circulatory system, and digestive system.
- 1.74 The student will discuss drug abuse and drug dependence.
- 1.75 The student will describe the typical effects of each of the following: narcotics, barbiturates, tranquilizers, amphetamines, hallucinogens.
- 1.76 The student will describe some drug treatment programs.
- 1.77 The student will list the causes of home accidents—fatal and injurious.
- 1.78 The student will list the four most frequent causes of highway deaths.
- 1.79 The student will list some job-safety techniques.
- 1.80 The student will list some human factors—physical and emotional—that contribute to accidents.
- 1.81 The student will list some natural hazards in the environment.
- 1.82 The student will explain the meaning of the different public warning signals.
- 1.83 The student will successfully complete twenty-four out of thirty-six chapter assignment sheets—these include vocabulary words and questions. The student will make all necessary corrections before going onto the next chapter.

## 1.0. ZOOLOGY

- 1.1 The student will increase his scientific terminology by correctly defining 250 terms dealing with zoology.
- 1.2 The student will name, describe and give the function for the eight major organ systems.
- 1.3 The student will name and describe the four stages of mitosis.
- 1.4 The student will list the "conditions" necessary for protoplasm to live.
- 1.5 The student will discuss the plausible theories for the origin of animal life.
- 1.6 The student will successfully complete charts with the following information: structure, feeding, locomotion, reproduction, respiration, excretion, and behavior for each of the following animals and give two examples of each:

Class Sarcodina *	
Class Mastigophora*	Phylum Protozoa
Class Ciliata *	
Class Sporozoa *	
Class Turbellaria *	
Class Cestoidea *	
Class Trematoda *	
Class Nematoda	
Class Asteroidea *	Phylum Echinodermata
Class Ophiuroidea*	
Class Echinoidea *	
Class Amphineura *	Phylum Mollusca
Class Scaphopoda *	
Class Gastropoda *	
Class Pelecypoda *	
Class Cephalopoda *	
Class Oligochaeta*	Phylum Annelida
Class Hirudinea *	
Class Polychaeta *	
Class Crustacea*	Phylum Arthropoda
Class Hirudinea*	
Class Arachnida*	
Class Chondrichthyes	
Class Osteichthyes	
Class Amphibia	
Class Reptilia	
Class Aves	
Class Mammalia	

BEHAVIORAL OBJECTIVES--VOCATIONAL SCIENCE  
1.0 ZOOLOGY

1.7 The student will discuss the progression of invertebrate evolution.

1.8 The student will discuss the progression of vertebrate evolution.

THESE BEHAVIORAL OBJECTIVES CAN AND WILL BE MODIFIED TO FIT THE INDIVIDUAL  
STUDENT'S NEEDS.

## BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE

## 1.0 Man in Space

- 1.1 The Man in Space Multi-Pak is a multimedia program designed to help students understand the problems and potentials of the space age in which they live.
- 1.2 The Man in Space helps the student come to the realization that not only is man in space today, but that man has been in space since his beginning. The role of man is approached from both a historical and a scientific perspective.
- 1.3 The student will develop the following concepts through the use of filmstrips, cassettes, study prints, wall moon map, raised relief moon globe, encyclopedia, newspapers, and other resources.
  - 1.31 ~~Man's interest in space and in observations of space is not new, having started long ago and continued to the present.~~
  - 1.32 Current successes in space study and space explorations are based on knowledge and techniques developed over a long period of time by a number of persons.
  - 1.33 Events of today related to man's exploration of space have often been suggested or described in literature of an earlier time.
  - 1.34 Sputnik, the first artificial satellite of the earth, was an important achievement for man in his strides toward space and was a very strong stimulus to putting man into space.
  - 1.35 The purpose and function of a space vehicle are important factors in determining the form and operation of the space vehicle.
  - 1.36 Events in any space program are carefully planned and carried out to get the greatest benefit from each step as the program progresses.
  - 1.37 The environment man encounters in outer space or upon the moon's surface is quite different from his environment on earth.
  - 1.38 Certain basic ideas about the nature of the moon have resulted from the various flights of spacecraft to the moon.
  - 1.39 Exploration of space beyond the moon is taking place through unmanned flights with significant results.
  - 1.40 Man's exploration of space has many ramifications.
- 1.4 The student will develop the above concepts by using 53 extension activities--these include questions, interpretation of charts and diagrams, mini reports, etc.
- 1.5 The student will receive 650 points out of 950 points to receive one fourth credit.

## BEHAVIORIAL OBJECTIVES--VOCATIONAL SCIENCE

## 1.0 Man and the Ocean

- 1.1 The student will describe five characteristics of the ocean.
- 1.2 The student will list five ways in which the ocean is important to man.
- 1.3 The student will name three groups important to the exploration of the ocean and tell about their contributions to oceanography.
- 1.4 The student will provide an example of oceanography as a science involving at least three sciences.
- 1.5 The student will compare the ocean floor with an island and describe three differences between the two.
- 1.6 The student will describe the variety of life found on the beach or about a coral reef.
- 1.7 The student will list three harmful effects man has had on the ocean.
- 1.8 The student will name the six continents on the bathymetric globe.
- 1.9 The student will identify and trace on the globe the limits of each of the three major oceans.
- 1.10 The student will be able to point out on the bathymetric world and describe three examples for each of the following: continental shelf, continental slope, mid-ocean ridge, rift valley, fan, canyon, trench, fracture zone, abyssal plain, island.
- 1.11 The student will name four fields of science important in carrying on any oceanographic study.
- 1.12 The student will name four uses man makes of the ocean and give a specific example of each.
- 1.13 The student will through the use of the forty-eight activity sheets develop answers for the above questions.
  - 1.131 The student can recognize key factors in an activity sheet.
  - 1.132 The student will proceed with an activity sheet and will require only a minimum of direction and assistance.
  - 1.133 The student will apply facts, observations, and hypothesis in developing tentative explanations for problems encountered in the activity sheets.
  - 1.134 The student will communicate the nature of his activities and the results of his efforts.
  - 1.135 The student will use the ocean features model, the bathymetric world, the study prints, the filmstrips, the activity sheets, and other resources to complete his investigations.
- 1.14 The student will receive 625 points out of 925 points to receive one-fourth credit.



## BEHAVIORAL OBJECTIVES--SOCIAL STUDIES

## 1.0 AMERICAN HISTORY

- 1.1 The learner will: arrange in proper chronological order listings of major historical happenings.
  - 1.2 The learner will: subdivide one list into two separate lists of A.) Cause and B) Effect occurrences in history.
  - 1.3 The learner will: by the use of a written outline, compare and contrast the U.S. Political System and operation to that of communist Russia.
  - 1.4 The learner will; be able to distinguish factual information from opinion by underlining such differences in editorial articles.
  - 1.5 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
  - 1.6 The learner will: after thorough studying of the Bill of Rights relate in writing three rights which are currently under question by the Supreme Court and what limitations these rights have.
  - 1.7 The learner will: compare and contrast by means of an outline the U.S. Free Enterprise system to that of Communist Russia.
  - 1.8 The learner will: illustrate in writing three current and three past practices by the U.S. Government which contracted the Free Enterprise philosophy of the United States.
  - 1.9 The learner will: utilize skills of inquiry and investigation of resources by conducting a minimum of one personal interview assignment as supplemental research.
- 2.0 The learner will: select various key persons during a particular time period and write reports on their lives and influences.

BEHAVIORIAL OBJECTIVES---SOCIAL STUDIES

1.0 AMERICAN GOVERNMENT

- 1.1 The learner will: by the use of a written outline, compare and contrast the U.S. Political System and operation to that of communist Russia.
- 1.2 The learner will: be able to distinguish factual information from opinion by underlining such differences in editorial articles.
- 1.3 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
- 1.4 The learner will: by means of an outline, compare and contrast the U.S. Free Enterprises system to that of communist Russia.
- 1.5 The learner will: utilize skills of inquiry and investigation of resources by conducting a minimum of three personal interview assignments as supplemental research.
- 1.6 The learner will: detect statements which are stereotyped statements in place of factual; by critically analyzing newspaper and or magazine articles.

## BEHAVIORAL OBJECTIVES--SOCIAL STUDIES

## 1.0 CIVICS

- 1.1 The learner will: arrange in proper written chronological order listings of major historical happenings.
- 1.2 The learner will: subdivide one list into two separate lists of A) Cause, and B) Effect occurrences in history.
- 1.3 The learner will: By the use of a written outline, compare and contrast the U.S. Political System and operation to that of Communist Russia.
- 1.4 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
- 1.5 The learner will: after thorough study of the Bill of Rights, relate in writing three rights which are currently under question by the Supreme Court and what limitations these rights have.
- 1.6 The learner will: compare and contrast by means of an outline the U.S. Free Enterprise system to that of Communist Russia.
- 1.7 The learner will: utilize skills of inquiry and investigation of resources by conducting a minimum of one personal interview assignment as supplemental research.
- 1.8 The learner will: verbally detect statements which are stereotyped statements in place of factual, by critically observing and listening to peer discussions and submitting a critique.
- 1.9 The learner will: listen to the cassette "Genocide American Style" and complete the review sheet.
- 2.0 The learner will: view the 8 individual filmstrips of the series "The Blackmen in U.S. History" and complete the 8 review sheets.

## BEHAVIORAL OBJECTIVES--SOCIAL STUDIES

## 1.0 VOCATIONAL ECONOMICS

- 1.1 The learner will: express the meanings of various critical economic terms in his own terminology without the aid of a dictionary.
- 1.2 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
- 1.3 The learner will: construct cause and effect "t" diagrams of various economic movements in history.
- 1.4 The learner will: listen to the cassette/filmstrip "The Blackman in the Depression" and complete the review sheet.
- 1.5 The learner will: by means of an outline, compare and contrast the U.S. Free Enterprise system to that of communist Russia.
- 1.6 The learner will: be able to arrange in proper chronological order listings of major historical economic happenings.
- 1.7 The learner will: compute and organize a family budget given a number of fixed expenses, gross income, and additional expense categories.
- 1.8 The learner will: compute net and gross incomes from hourly wage figures.
- 1.9 The learner will: appraise a minimum of 3 career choices as to their requirements, benefits and advantages.
- 2.0 The learner will: compute finance charges actually paid under given problem solving situations.
- 2.1 The learner will: assess the effects of down payments on home mortgages and determine the monthly payments on total interest paid in actual problem solving situations.
- 2.2 The learner will: analyze advertising techniques and gimmicks in purchasing.

## BEHAVIORAL OBJECTIVES—SOCIAL STUDIES

## 1.0 GENERAL PSYCHOLOGY

- 1.1 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
- 1.2 The learner will: utilize skills of inquiry and investigation of resources by conducting a minimum of one personal interview assignments as supplemental research.
- 1.3 The learner will: be able to analyze in writing their own personal emotions and account for a basic origination (i.e. anger, fear of dark) by submitting self-evaluative reports.
- 1.4 The learner will: verbally detect statements which are stereotyped statements in place of factual, by critically observing and listening to peer discussions and submitting a critique.
- 1.5 The learner will: develop a working knowledge of the differences on educational requirements and job descriptions of the psychiatrist and psychologist as measured by test questions and results.
- 1.6 The learner will: develop a working knowledge of ten basic mental health terms as measured by test questions and results.

## BEHAVIORAL OBJECTIVES--SOCIAL STUDIES

## 1.0 ADVANCED PSYCHOLOGY

- 1.1 The learner will: interview a psychologist, guidance counselor, or social worker and discuss their education or training backgrounds and requirements.
- 1.2 The learner will: define all the basic sciences incorporated in Psychology and relate the nature of their studies. (Anthropology, Sociology, Archeology, Chemistry, Biology, etc.)
- 1.3 The learner will: write essays on the lives and influences of Sigmund Freud and Ivan Pavlov.
- 1.4 The learner will: make listings of classes they have taken that have been aided by generalized or transfer learning.
- 1.5 The learner will: create a poster of mnemonic devices used by their family and/or friends.
- 1.6 The learner will: secure data from local police officials or drivers education departments on the deterioration of reaction time for drivers under the influence of alcohol or drugs and write a paper on their findings.
- 1.7 The learner will: compose in depth a case study on an imaginary family situation with conflict.
- 1.8 The learner will: study a review of Dr. Harris book I'm OK, You're OK, and answer 10 questions over the material.
- 1.9 The learner will: develop, distribute, and evaluate a questionnaire on "The Sources of Disagreement between Adolescent Boys and Girls".

## BEHAVIORIAL OBJECTIVES--SOCIAL STUDIES

## 1.0 ETHNIC STUDIES

- 1.1 The learner will: express the meanings of various critical terms of the particular ethnic group he is studying, in his own terminology, without the aide of a dictionary.
- 1.2 The learner will: examine the losses incurred by cultural transition and assimilation processes.
- 1.3 The learner will: demonstrate ability to interpret charts by reproducing a minimum of one as a poster and writing a supplemental paragraph interpreting the details in written form.
- 1.4 The learner will: construct cause and effect "T" diagrams of various movements throughout American History in relationship to the particular ethnic group he is studying.
- 1.5 The learner will: compare and contrast family structures of the ethnic group he is studying to that of 20th century America.
- 1.6 The learner will: detect statements which are stereotyped statements in place of factual, by critically analyzing newspaper and/or magazine articles.
- 1.7 The learner will: listen to the cassette "Genocide, American Style" and complete the review sheet.
- 1.8 The learner will: view the 8 individual filmstrips of the series "The Blackman in U.S. History" and complete the 8 review sheets.
- 1.9 The learner will: be able to arrange in proper chronological order listings of various critical happenings in the history of the particular ethnic group he is studying.
- 1.10 The learner will: compare and contrast in written form the marriage customs and selection procedures of the group he is studying to that of the U.S.
- 1.11 The learner will: examine the various religions and practices of the group he is studying.
- 1.12 The learner will: be able to match occupational titles with names of prominent people within a particular group.