



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
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Guide for Curriculum Unit 81.06.01

by

- 1) Joyce Bryant, *Math on the Computer*, A brief history of the computer; list of terms and definitions; some simple programming examples.
- 2) Sheryl A. DeCaprio, *Flowcharting. A Method of Problem Solving*, Description of flowchart terms with simple examples.
- 3) John Crotty and Joseph Cummins, *The Effective Use of Computers in Applied Mathematics*, Graphic display programs to illustrate the meaning of fractions. (Written in BASIC for the Hewlett-Packard 2100.)
- 4) Geoffrey P. Smith, *An Introduction to the Use of Computers*, A set of teaching programs written in TRS-80 BASIC which review elementary arithmetic.
- 5) Anthony P. Solli, *Looking into the Connecticut Daily Numbers*, Programs written in Hewlett-Packard 2100 BASIC to show the nature of random numbers.
- 6) Nancy Wyskiel, *Understanding BASIC programming for Remedial Students*, Elementary introduction to programming in BASIC.
- 7) Laretta J. Fox, *Introducing Computer Programming in a Traditional Classroom*, Formulas and programs to find areas of common plane figures (triangles, trapezoids, etc.).
- 8) Kathleen M. Huhner, *The Basics of BASIC*, Discussion of standard BASIC programming techniques (Flow charts, use of loops, etc.)
- 9) James F. Langan, *Graphing and the Computer*, Two programs in Hewlett-Packard 2100 BASIC illustrate simple xy plotting and more advanced projective geometry (stereograms and rotation matrices).

Math on the Computer by Joyce Bryant

The unit is designed and organized to introduce the student to the history of the computer and its advancements. The unit provides a definition of the computer and the basic components of a typical data processing system. Familiarization of the languages and programming will enable students to write simple programs in math and do them on the computer. The terms and definitions will provide the student with a working vocabulary. The main idea is to have the student do Math using the computer

(Recommended for 7th and 8th grade Math.)

Key Words

Computers History Programming Basic FORTRAN

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