



In this unit, we will explore a new programming environment – Scratch. We will program sprites, create sequences, order commands change the appearance of our projects and make an instrument using the coding language designed by Mitchel Resnick.

Knowledge

- I know how to create algorithms for use when programming.
- I know how to write programs that accomplish specific goals.

Skills

- CS3.7 I can design and create programs.
- CS3.8 I can write programs that accomplish specific goals.
- CS3.9 I can use repetition in programs.
- CS3.10 I can work with various forms of input.

Inspiring Individuals



Mitchel Resnick

Resnick's research group has developed a variety of educational tools that engage people in new types of design activities and learning experiences, including the *Programmable Bricks* that were the basis for the award-winning Lego Mindstorms and StarLogo software. Resnick's group has developed a new computer programming language, named Scratch, that makes it easier for children to create animated stories, video games, and interactive art. Resnick is a winner of the 2011 Harold W. McGraw, Jr. Prize in Education He has been listed as one of the 100 most creative people in Business 2011 by Fast Company.

Helpful reminders

Choice of language Stage Instructions palette Scripts area

To write a program, drag and drop instruction blocks here.

Backdrops area Sprites area

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when clicked
repeat 2
  play sound Rattle until done
  play sound Scream until done
repeat 2
  play sound Ripples until done
  play sound Rattle until done
  play sound Whoop until done

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Vocabulary

Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop, motion, turn, point in direction, go to, glide, sequence, event, task, design, run the code, order, note, chord, stage, design, algorithm, bug, debug