

GRADE 3 INFORMATION TECHNOLOGY FRAMEWORK

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OVERVIEW:

Technology is an integral part of the Third Grade Curriculum. Using the floor robot (Probot) and Terrapin Logo Programming Language, students develop the concept of repeating sequences of commands, use procedures and sub procedures to create pictures of familiar objects and repeat loops for drawing squares and mazes. Basic operations and concepts are covered during class time.

EXPECTATIONS:

The student will be able to:

Understand Computer Basics (Input, Output & Storage Devices).

Interact with peers to play group activities and develop problem-solving, critical-thinking, and decision-making skills.

Explore floor robot movements in a simple path to practice problem-solving.

Write code for short programming tasks to draw simple shapes using a programming language.

Understand the concept of procedure.

CODING COMMANDS USED:

CS (Clear)

FD (Forward)

BK (Back)

LT (Left)

RT (Right)

Go

Proc (Procedure)

Rep [] (Repeat)



ACTIVITIES

Paper Graph Programming.

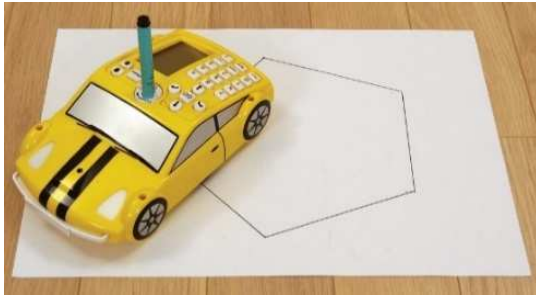
Probotix - Worksheets - Digital Numbers & Letters, Simple Shapes, Areas, Mazes.

Probot - Group Activities - Custom Shapes, Areas and Mazes.

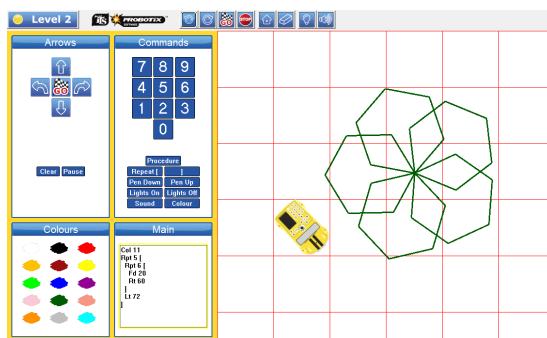
Weblogo – Square Letters & Numbers, Simple Shapes (Squares, Rectangles), Custom Shapes, Flags, Areas.

RESOURCES:

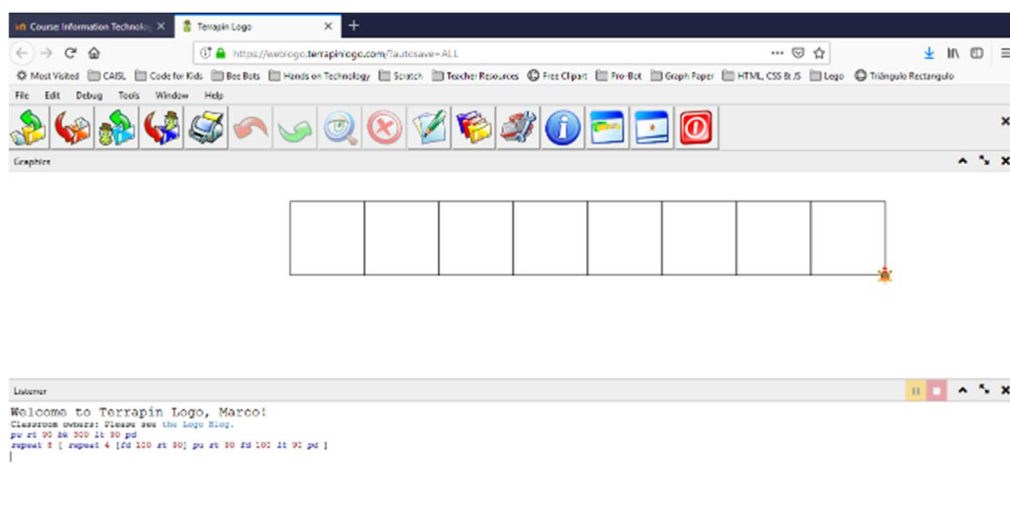
Probots



Probotix (Probot simulator)



Weblogo



PERFORMANCE INDICATORS:

CRITICAL THINKING, PROBLEM SOLVING & DECISION MAKING

Use the numeric keypad on the floor robot, to program a sequence of instructions to make it go forward, back, left and right. (e.g. FD 5, BK 2). DOK 2

Control the floor robot's pen to draw a sequence of pre-defined programming commands.

DOK 2

Use basic primitives of Terrapin Logo Programming Language to draw simple shapes with right angles. DOK 2