

Programming - Repetition in Shapes

Construction

To build something from parts.

Year 4

Prior Knowledge

Year 3: Sequence in music.
Events and actions.

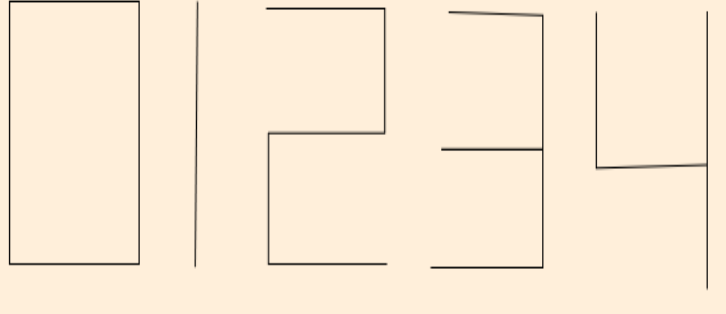
Year 2: Robot algorithms.
An introduction to quizzes.

Year 1: Moving a robot.
Introduction to animation.

Future Knowledge

Year 5: Selection in physical computing.
Selection in quizzes.

Year 6: Variables in games. Sensing.



My Component Knowledge:

Lesson 1: I know that accuracy in programming is important.

Lesson 2: I can create a program in a text-based language.

Lesson 3: I can explain what repeat means in every day tasks and in sequencing.

Lesson 4: I can modify a count-controlled loop to produce a given outcome

Lesson 5: I can decompose a task into small steps

My Composite Knowledge:

I can use basic commands to draw shapes by repeating instructions.

My Powerful Knowledge:

I can use a text-based programming language to create programs by planning, modifying and testing commands to create shapes and patterns.

Key Vocabulary

Tier 1: turtle

Tier 2: program, commands, procedure

Tier 3: code snippet. Count-controlled loop, debug

FD 100 RT 90

FD 200 RT 90

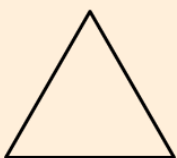
FD 100 RT 90

FD 200 RT 90

What is a
code
snippet?

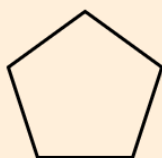
What comes next in this repeating pattern?

Triangle



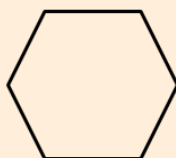
120°

Pentagon



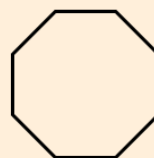
72°

Hexagon



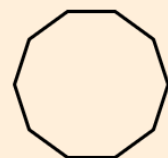
60°

Octagon



45°

Decagon



36°