CODING IN THE ALBERTA CURRICULUM

Start ▶

KINDERGARTEN

1 →
2 →

Instructions are directions to be followed; order can affect outcomes; follow a sequence of two steps.

GRADE 1

Instructions can be verbal, audio, visual, and written; determine if instructions with two or three steps in different orders produce the desired outcome.
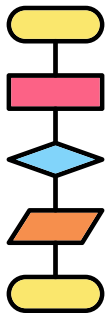
GRADE 2

Creativity can be used to design instructions; create three to four-step instructions to achieve a desired outcome; debug errors; instructions may be simplified by repeating steps.

GRADE 3

Computational thinking; create a set of instructions that could be followed by a human or machine to complete a task; the same outcome can be achieved in different ways.

GRADE 4

Design process; an algorithm is a sequence of instructions; artifacts are objects/products made by humans, machines or computers; plan, create, and test an artifact to meet a need; collaborate to design an algorithm to solve a problem.

GRADE 5

A computational artifact is anything created by a human using a computer; translate a given algorithm to code using a visual block-based language; design an algorithm that includes a loop; design multiple iterations of an artifact.

GRADE 6

The process of abstraction includes: determining what details to keep/what to ignore, removing unnecessary details, identifying important information, and generalizing patterns; an abstraction is a simplified version of something complex; use a visual block-based language to design code that includes sequences, loops, and conditionals (IF-THEN-ELSE statements); computers and technology can have personal, social, environmental, and economic impacts.

Stop

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