

Karel Project #10

FRUIT LOOPS

You can use **repeating patterns** to make your maze more **fun** to solve with a **program**.

Click on **File** and save the worksheet in the folder **course-karel-projects** under the new name, **fruit-loops**.

Click on  **Designer** and select  to remove the example maze.

Goal: Use Repeating Patterns

To create a maze that uses a **repeating pattern**, you will:

1. Create a maze with a **repeating pattern** of **Walls** and **Objects**.
2. **Repeat** your **pattern**.

Step 1: Create a Maze With a Repeating Pattern

Start by adding an **Apple** to a blank maze. Choose a **Theme** that has a **different color** than the **Apple**.



Now build a tunnel of **Walls** around the **Apple** as shown below. This is the **Apple Pattern**. Every time **Karel** reaches an **Apple**, the **Apple Pattern** will be there.



Step 2: Repeat Your Pattern

Build the **Apple Pattern** again in another part of your maze.



When the player sees the **Apple Pattern** in different parts of your maze, they might use an **if-statement** like this:

```
1 if apple
2 | #apple pattern goes here
```

Or a **while-loop** like this:

```
1 while apple
2 | #apple pattern goes here
```





Project Checklist

Your Project will be finished when:

1. Your maze has a [repeating pattern](#).
2. Each pattern has a corresponding [Object](#).
3. Your [maze](#) is solvable.