

# Karel Project #12

## STRANGE SHAPES

**Nature** produces many inspiring **shapes**. We can use these to develop our **mazes**.

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

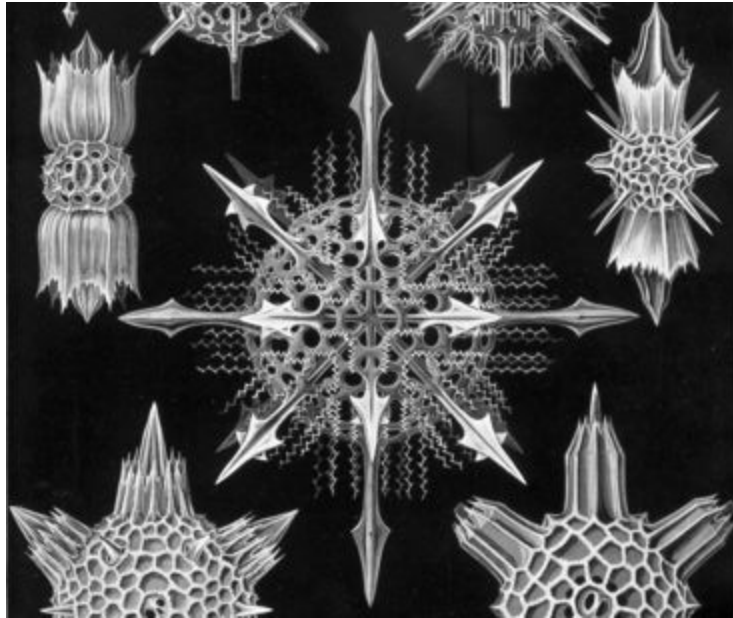
### Goal: Create a Maze Inspired by Nature

To create a maze based on **nature**, you will:

1. Find **shapes** in Ernst Haeckel's **pollen grains**.
2. Create a corresponding **maze** for Haeckel's **pollen grains**.

# Haeckel's Pollens

Take a look at this:



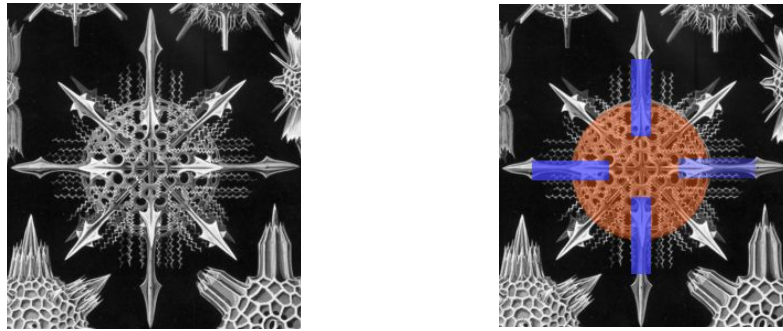
Source: (Ernst Haeckel) Wikimedia Commons

What does this **drawing** look like? Can you see any recognizable shapes in these **symmetrical forms**?

For this project, you will be using this drawing as **inspiration** for a maze.

## Step 1: Deconstruct Haeckel's Pollen Grains

The **shapes** above were drawn by Ernst Haeckel. He was a biologist that liked to draw the tiny **pollen grains** of flowers as seen through a microscope. **Pollen grains** are part of the the reproductive system of flowering plants, and they exhibit remarkable **symmetry**.



There is a **circle**, and **4 rectangles**. What other **shapes** can you see?

## Step 2: Create a Maze Based on the Pollen Grains

In a new **maze**, draw the **shapes** from Ernst Haeckel's **pollen grains**. You can use **Objects**, **Containers**, and anything you like. Here are some examples:



Tips:

- Make your maze solvable once you are satisfied with your shape.
- Research other images of pollen for more inspiring shapes.



## Project Checklist

Your project will be finished when:

1. Your maze resembles Ernst Haeckel's pollen.
2. Your maze is **solvable**.

**Good work. There are shapes all around us. You never know where you will find inspiration.**



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