

# GROWING PATTERNS WONDER WORKSHOP

Math worth talking about!

available at [learnx.ca/wonder](https://learnx.ca/wonder)

## DIGITAL CERTIFICATE TASKS

To receive a digital certificate of completion, please complete and submit the following tasks in a single document (Word or PDF) to [info@learnx.ca](mailto:info@learnx.ca), with your full name and email address at the top of the document. [In partnership with STEAM3D Research Lab & [convergence.tech](https://convergence.tech)]

### A. Growing patterns

### B. Plotting growing patterns

### C. Creating growing patterns

### D. Algebraic representations

1. For sections A-D as a whole, report on (a) what you learned, (b) what you felt, and (c) what else you want to know.



### E. Mathematician Interview

1. What did you learn from Dr. Lindi Wahl?
  - a) about her work?
  - b) about constants and variables?
  - c) about different representations of math patterns?
  - d) about different growing patterns?
  - e) about how a mathematician thinks?
2. What is interesting or surprising about what you learned?
3. What is “seeing as”, when did you experience it, and what was the effect?
4. Share what you learned about how a mathematician thinks about growing patterns with a friend, colleague or family member, in a way so they experience math surprise and insight.
  - a) Ask them to tell you (a) what they learned, (b) what they felt, and (c) what else they want to know.
  - b) Report their answers and discuss them in relation to (a) your own experience and learning with the tasks and (b) ideas in sections A.1 - A.10.



### F. Modelling with code

1. Discuss your experience with the coding activities.
2. Share what you learned from the different representations of code and of growing patterns.