



WELCOME TO KINDERGARTEN



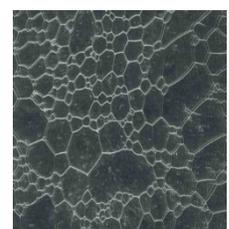
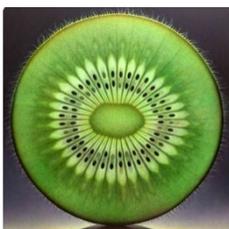
Flow, Spin, Grow

TALK

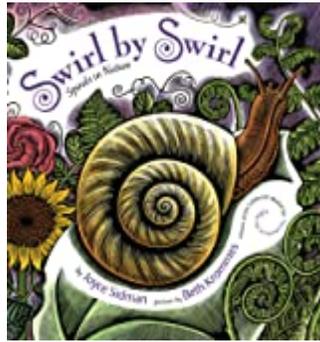
“Flow, Spin, Grow” is a book that introduces children about patterns in the natural world. Patterns are almost anywhere in nature. If you look for them, you will surely find them. Just as the branches of a tree spread upwards into the sky, roots branch deep into the ground. Branches also spread through our bodies, inside our lungs and veins. Storms and snail shells spiral; electrons and galaxies spin.

How to use this book to inspire your young child to observe, discover and explore the hidden structures, patterns, shapes and wonders in their world and

- Talk about what you see on each page. What patterns do you see? Are there repeated patterns?
 - Patterns: symmetries, trees, spirals, meanders, waves, foams, tessellations, cracks, stripes
 - <https://heathercline.zenfolio.com/blog/2016/11/patterns-in-nature>
- Do outdoor explorations & activities based on what you find in the book. While engaging in these activities, take note of the patterns you may find:
 - Dig: Go outside and dig in the mud, soil, sand, rocks.
 - Flow: Go on short walks/hikes where there are brooks, streams, waterfalls and watch and listen to the flow of the water.
 - Breathe in Deep: A mindful experience of how air enters through your nose and into your body on a cold day, hot day, rainy day, snowy day, windy day, etc. Visualize the air flowing through the “branches” inside your body.
 - Spin, twirl, whirl, swirl: Look specifically for these patterns when you explore.
 - Explore: Talk about the natural things you see with thought and meaning, and with awe and wonder.
 - Music & Movement: Move your body to these words: spin, twirl, whirl, swirl, dig, flow, branch up, branch down, and grow.



READ



- **Flow, Spin, Grow** by Patchen Barss & Todd Stewart - <https://www.youtube.com/watch?v=Janliz3m27E>
- **Pitter-Pattern** by Joyce Hesselberth - <https://www.youtube.com/watch?v=V0cwn31o1DI>
- **Swirl by Swirl** by Joyce Sidman - <https://www.youtube.com/watch?v=v0ZRdDPYgtU>

CREATE



Loose parts & patterns: Draw various patterns and designs on a piece of paper. Use various loose parts/items and place them on the patterns to create a design.

Nature Art: Go on a nature walk and collect different sizes and types of items, e.g. leaves, twigs, acorns, stones, pebbles and try the following activities:



- **Leaf Rubbing:** Gently clean and dry the leaves. Choose a leaf and place a piece of paper on top of it. Rub crayons over the entire leaf until the “drawing” of the leaf appears on the paper.

- **Nature Mandala:** Create a picture/mandala with items found.

PLAY



Sidewalk chalk obstacle course:

Using sidewalk chalk, create an obstacle course by drawing patterns, swirls, and lines. Decide as a group on how to run the course, e.g. jump, hop on one foot, walk sideways, run, etc.



Nature Patterns:

Collect things of various colors, sizes, textures on a nature walk. Find at least four of each type of item so that there is enough to work with to make patterns. (Example: rocks, twigs, leaves.) Remind your child to respect nature by only collecting items off of the ground and not pick anything that is still growing on a plant. Create patterns and ask your child what patterns they made.

