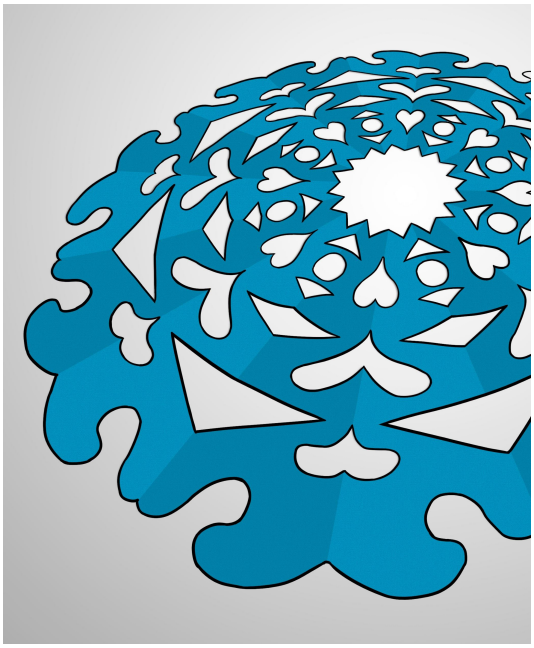
MATH
IS WHAT YOU MAKE IT!
Natural Math

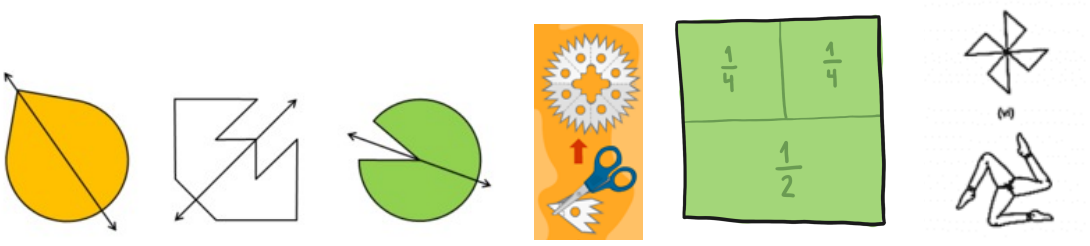
Find examples
Pose problems
Design puzzles
Ask questions
Write stories
Build models
Create art
Make mathematics

Snowflakes



Try: Take a sheet of paper. Fold into wedges. Cut out notches. Unfold, look, fold again.
Interesting choices: What shapes to cut out? Where?

Actions	fold, unfold, cut, predict, model
Things	sheet, layer, folded side, free edge, middle point, hole vs. notch, wedge
Concepts	angle, multiplication, fraction variable reflect, line symmetry, rotate, radial symmetry



Mathematics – ***big subject areas***

Isometric transformations – *algebraic geometry*
Repeated folding and limits – *calculus*
Puzzles and art – *recreational mathematics*
Snowflake data in one wedge – *information theory*
Traditional papercraft – *ethnomathematics*

From International Mathematics Subject Classification (MSC)

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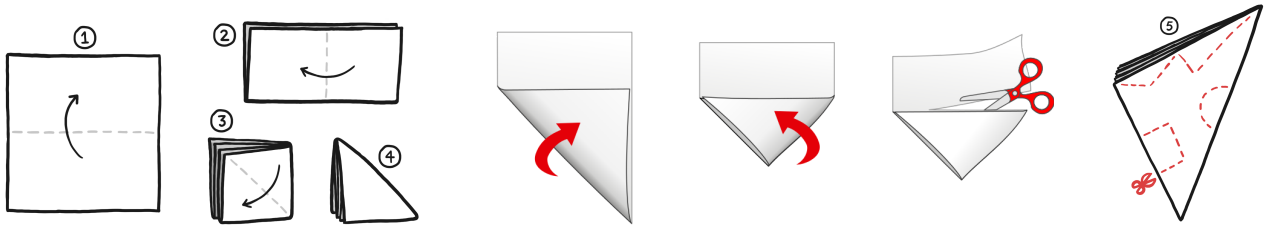
Snowflake Prompts

Use our prompts + **Create** new prompts = Make math



1. Multiplying holes

Try: Cut out a notch.
Choose: Where to cut.
Unfold and look: The holes multiply.

3. Shape transformer

Try: Cut out a notch.
Choose: What shape is your notch.
Unfold and look: The shapes change.

Fold back. Try again.

2. Multiplying holes 2

Try: Cut out a notch.
Choose: Where to cut.
Predict: How many holes will that make?
Unfold and check.

4. Shape transformer 2

Try: Pick a shape. Cut out a notch that unfolds into your shape.
Choose: What shape to aim for. Try △ ⚪ ♡ ⬜.
Unfold and check: Did your cut make your shape, or a surprise shape?

5. Your special snowflakes

Try: Many holes of different shapes.
Choose: Where to cut, shapes, sizes, and how to combine.
Design: Your style of snowflake art.

Keep on folding!

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