



Short Activity
Ages 3–5
15-30 minutes

Mermaid Math

Description

Create a felt mermaid tail and explore simple counting and patterns using a variety of tactile decorative items.

Number of participants

For any number of participants, as space and materials allow.

Space considerations

A flat surface (table, floor mat) where items can be laid out

Competencies

- Numeracy
- Colour identification
- Pattern recognition
- Fine motor skills

Materials

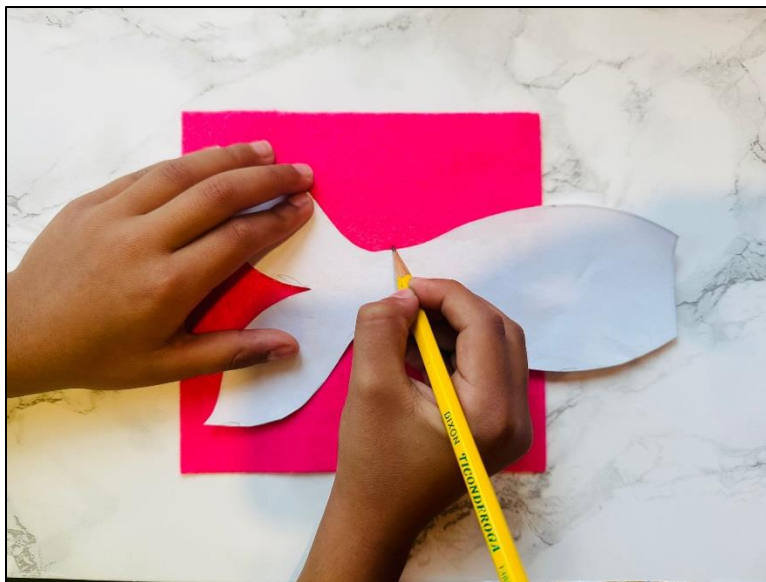
- Felt sheets or squares large enough to fit tail template
- Small pieces of felt in various colours and shapes (at least four different ones if using the pattern template)
- Other tactile items such as pompoms, stickers
- Scissors
- Pencil/marker for tracing
- Glue (optional)
- Small containers for glue and craft/popsicle sticks for spreading glue (optional)

Preparation

- Print tail template onto cardstock or heavier paper to make it easier to trace onto felt



- If the template is larger than the felt sheet, resize before printing or trim as needed from the original size while tracing.



- Cut out mermaid tails ahead of activity or consider tracing them onto felt and having participants cut them out as part of the activity.



- Cut small bits of felt into various shapes and sizes. The scrap pieces of felt from the tails work well for snipping into squares, rectangles and triangles.
- Place small decorative items in wide-mouth bowls or containers so they can be accessed easily by participants.
- Ensure there are enough small items for the number of participants involved.
- If using glue to make this activity more permanent, prepare small containers of liquid glue with craft sticks.
- Print out pattern templates for participants if using them.

Implementation

1. Have participants try to match different patterns from the pattern templates or create their own.
2. Have them try borders in various colours or use a combination of differently shaped or textured items to create patterns throughout the area of the tail.
3. Have participants fill in as much of their mermaid tail as they can. Encourage them to think about
 - How many "scales" can fit?
 - How many of each colour are there? How many of each shape?
 - What kinds of patterns can be made using different shapes, colours or items?



4. Discuss the types of patterns as participants work: AB, ABB, etc. Encourage them to identify the patterns they're creating and share what they have done.
5. If using the pattern templates, participants can draw their patterns before creating them on their tails or take the templates home to practise more variations.
6. Participants can easily remove and adjust their patterns if working with felt (without glue) or pompoms.



Accessibility considerations

- Although small bits of felt will naturally stick to the felt tails well, use small tactile stickers (gemstones, for example) instead to avoid items being knocked off.



- Make the mermaid tail itself larger and use larger items to create the scales, such as bottle caps or other recycled items.
- Experiment with different textured surfaces for the mermaid tail: construction paper or playdough stretched to fit a printed template can provide interesting variations.

Book suggestions

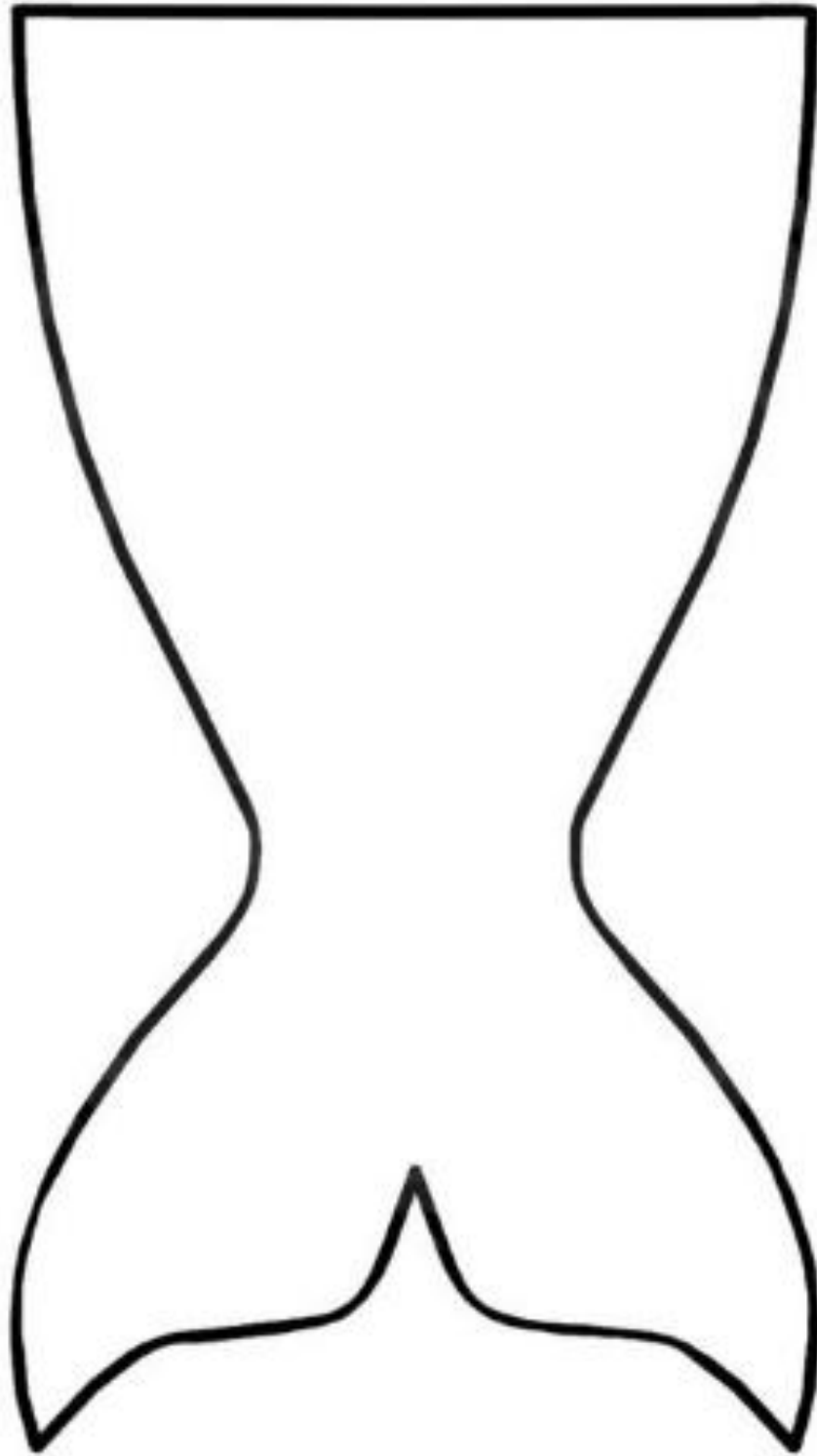
- *Mermaid Days: A New Friend* by Kyle Lukoff and Kat Uno
- *The Seaweed Blanket* by Nancy Deas and Mike Deas
- *Shark Girl* by Kate Beaton

Download links

- Mermaid Math – Activity PDF
- Mermaid Math – Tail Template
- Mermaid Math – Pattern Ideas Template

Images





Mermaid Tail Scale Patterns

Patterns always follow a rule and must repeat.
Can you try some of the patterns below on your mermaid's tail?

<p>My mermaid pattern is</p> <p style="text-align: center;">AB AB</p> <p>This might look like</p>	<p>My mermaid pattern is</p> <p style="text-align: center;">ABB ABB</p> <p>This might look like</p>
<p>My mermaid pattern is</p> <p style="text-align: center;">ABC ABC</p> <p>This might look like</p>	<p>My mermaid pattern is</p> <p style="text-align: center;">ABCD ABCD</p> <p>This might look like</p>