

Minus loses things out of holes in his clothes

Times gathers things at the speed of light

Division splits things up so they are just right

## The Four Processes

The Four Processes are the very same math processes that children learn everywhere:

- Addition (Plus)
- Subtraction (Minus)
- Multiplication (Times)
- Division (Divided By)

In Waldorf teaching, there is a strong backbone of playfulness and imagination. This doesn't end with the start of formal schooling. Rather, stories, fingerplays, songs, and the like are the vehicles used to teach the theories and practice of things like math and science. The four processes is commonly taught using a story that personifies the processes into loveable characters who also represent the temperaments.

Addition (Plus) is the Phlegmatic one, who is relaxed, quiet and kind. Also consistent and rational, he will count things carefully, one by one.

Subtraction (Minus) is a Melancholic gnome. He is sad; having holes in his pockets, he tends to lose things.

**Multiplication** (Times) is a lively and warm-hearted Sanguine gnome who is the life of the party. She counts quickly, skipping over numbers to arrive at her total.

**Division** (**Divided By**) takes on a leadership role. Her Choleric nature shows as she divides things up fairly.

There is a lot to read about the four processes from a Waldorf perspective, and so here we will focus on creating your own Four Processes Math Set that you can use in your home or homeschool.



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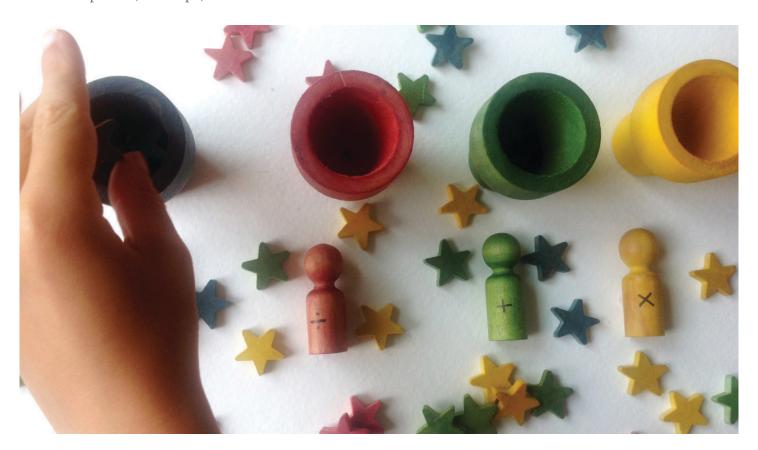
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## Making Your Four Processes Math Set

## **MATERIALS**

- Wooden pegs or people (4-6)
- Wooden counters in any shape (many Waldorf stories focus on gems or jewels) (min. 48)
- Small wooden bowls or pots (4)
- Natural plant-based dyes or watercolour paints
- Paint brushes
- Beeswax polish (see recipe)





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## **INSTRUCTIONS**

- 1. Divide all wooden materials into four groups, each with one peg person, one bowl, and 12 counters.
- 2. Each group of materials can be painted one colour red, blue, yellow, or green. Set on a tray to dry.
- 3. Once the materials have dried, consider if you'd like to apply a second coat for depth of colour.
- 4. Using a sharpie or wood-burning tool, write the symbols for the four processes on the wooden people.
- Blue +
- Green -
- Yellow ×
- Red ÷
- 5. Apply the beeswax polish to each wooden item. Rub it on and then wipe excess with a dry cloth.







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6. Store your set in a basket or box to keep it all in one place.



RECIPE <u>beeswax polish</u> FROM THE KITCHEN OF <u>tiny p</u>	
PREP TIME 15 min BAKE 20	
INGREDIENTS  1 part beeswax (block)  4 parts oil	note: you can use coconut oil, olive oil, o'r jojoba oil
* * * ;	* * * *

INSTRUCTIONS
* adult teamwork required!
Shred your beesevax with a cheese grater.
Storetop: Heat oil and beeswax in a double boiler on high heat.
Stir and stir until the beeswax is all melted into the oil.
microware: Heat oil and beeswax in a microware safe container,
stopping to stir and check if the beasuax is melted.
Remore from heat, pour into containers + stir.
Dip a cloth into the polish, rub it into your PEASANT
wood and let it dry!