# Supporting my child in French math



### Prayer



### Agenda

- Developing the right mindset
- What will your child learn at school
- Math Vocabulary
- How to help my child in math
- Math games
- Online math games and resources



## Nurturing problem solving and communicating mathematically

<u>A problem solver</u> is someone who questions, finds, investigates and explores solutions to problems; demonstrates the ability to stick with a problem to find a solution; understands that there may be different ways to arrive at an answer; and applies math successfully to everyday situations.

You can encourage your child to be a good problem solver by including him in routine activities that involve math—for example, measuring, weighing, figuring costs and comparing prices of things he wants to buy.

<u>To communicate mathematically</u> means to use mathematical language, numbers, charts or symbols to explain things and to explain the reasoning for solving a problem in a certain way, rather than just giving the answer. It also means carefully listening to understand others' ways of thinking and reasoning.

You can help your child learn to communicate mathematically by asking her to explain what she must do to solve a math problem or how she arrived at her answer. You could ask your child to draw a picture or diagram to show how they arrived at the answer.

## Nurturing problem solving and positivity towards math

<u>Mathematical reasoning</u> ability means thinking logically, being able to see similarities and differences in objects or problems, making choices based on those differences and thinking about relationships among things. You can encourage your child's mathematical reasoning ability by talking frequently with him about these thought processes.

## Things your child needs to know to have a growth mindset in Mathematics

#### 1. Problems Can Be Solved in Different Ways

It is more than just finding the correct answer, it's the process and applying what you learned.

#### 2. Wrong Answers Sometimes Can Be Useful.

They can lead you to better understanding your tendencies and weaknesses.

It develops your reasoning skills.

## Things your child needs to know to have a growth mindset in Mathematics

#### 3. Its ok to take risks

Help your child to be a risk taker. Help him see the value of trying to solve a problem, even if it's difficult. Encourage them to verbalize their reasoning.

#### 4. Working Maths in your head is important

It will be the most used very often when making quick calculations.

### Snapshot by grade for Math

Scroll to the bottom of the Alberta math curriculum page.

https://www.alberta.ca/curriculum-mathematics.aspx

## How to help your child when you don't know how to solve the math problem

Here are some questions to ask:

- Can you tell me what you know now? What math facts do you have?
- What do you need to find out? Can you estimate the answer?
- How might you begin? What can you try first?
- Can you make a drawing or picture to get started?

## While your child is working on a problem, ask:

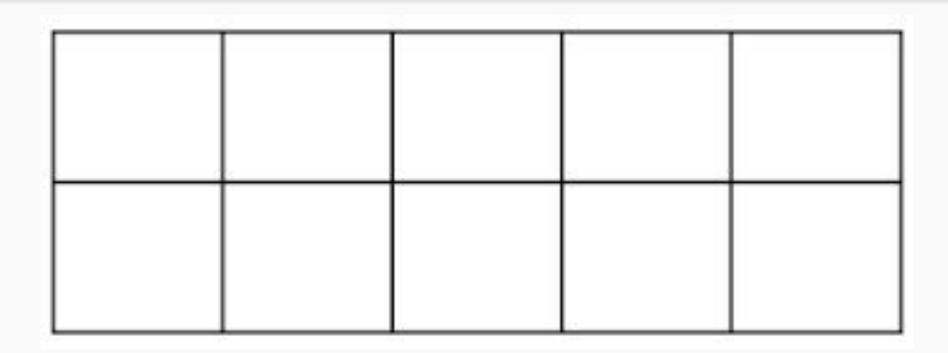
- How can you organize your information? Will a list or table help?
- What would happen if ...? Show me what you did that didn't work.
- Can you explain the strategy you're using to solve this? Why did you ...?
- What could you do next? Do you see any patterns?

### When your child finds an answer, ask:

- Does that answer make sense? Why do you think that?
- How did you get your answer? Why do you think it's right?
- Convince me that your solution makes sense. Explain it in a different way

### Ten frame for addition and subtraction

Tool for kindergarten to gr.1



## Matrices (arrays) for multiplication and divisions

### One hundred charts

Can be used for subtracting and adding numbers up to 100.

Can be used for skip counting.

### **NUMBERS 1-100**

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

### Two hundred chart

Can be used for subtracting and adding numbers up to 200.

Can be used for skip counting.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

#### **Translated Math Terms**

- *une opération mathématique:* mathematical operation
- ajouter: to add
- *l'addition*: addition
- *plus:* plus
- **soustraire:** to subtract
- moins: minus
- *multiplier:* to multiply
- *la multiplication:* multiplication
- *multiplié par:* multiplied by

- **diviser:** to divide
- *la division*: division
- divisé par: divided by
- *un nombre binaire:* binary number
- *calculer:* to calculate
- *un nombre pair:* even number
- un nombre impair: odd number
- un nombre entier: whole number
- un nombre premier: prime number
- un chiffre: digit

#### Translated Math Terms

- **positif:** positive (adj) la difference: difference un calcul: calculation la division complexe: long un nombre cardinal: division cardinal number

  - **une constante:** constant
  - compter: to count
  - **décimal:** (adj) decimal
  - une virgule: decimal
  - un multiple: multiple

percentage

- **Pourcent**: percent
- un pourcentage:

- *l'equalité:* equality est égale à: equals
  - - *n'est pas égale à*: does not equal
    - **négatif:** negative (adj)

    - multiplication table

    - - la table de multiplication:

#### **Translated Math Terms**

- un problème de math: math problem
- résoudre un problème de math: to solve a math problem
- *le produit:* product
- *un quotient:* quotient
- un ensemble: set
- *une solution:* solution
- le calcul: sum
- *sommer, additionner:* to sum
- un symbole: symbol
- une variable: variable

- est équivalent à: is equivalent to
- est supérieur à: is greater than
- est inférieur à: is less than
- une équation: equation
- *un exposant:* exponent
- *une fraction:* fraction
- *un facteur:* factor
- *mettre en facteurs:* to factor
- *une fonction:* function
- *un graphe:* graph
- *un logarithme:* logarithm

### Google translate App in picture mode



You can translate whole documents using the picture app



### Addition war

### Subtraction war





### Multiplication War



# Multiplication battleship



### Links for math games

- Fun brain: <a href="https://www.funbrain.com/math-zone">https://www.funbrain.com/math-zone</a>
- Broken calculator for all grades: <a href="https://toytheater.com/broken-calculator/">https://toytheater.com/broken-calculator/</a>
- Broken calculator gr.3-4 and up: <a href="https://www.mathsisfun.com/games/broken-calculator.html">https://www.mathsisfun.com/games/broken-calculator.html</a>
- Interactive ten frame: <a href="https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/">https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/</a>
- Math game that works many math concepts gr.2-3
  https://www.tvokids.com/school-age/games/tumbletown-mathletics
- Math tv shows: <a href="https://www.tvokids.com/school-age/mathematics">https://www.tvokids.com/school-age/mathematics</a>
- Homework help videos:
  <a href="https://www.tvokids.com/school-age/videos/homework-zone-mathematics/dividing-decimal-numbers">https://www.tvokids.com/school-age/videos/homework-zone-mathematics/dividing-decimal-numbers</a>

- Apps, some for math but all are educational: <a href="https://www.tvokids.com/school-age/apps">https://www.tvokids.com/school-age/apps</a>
- List of more kids math websites: <a href="http://www.kidsites.com/sites-edu/math.htm">http://www.kidsites.com/sites-edu/math.htm</a>
- Math games in French: <a href="https://www.logicieleducatif.fr/math.php">https://www.logicieleducatif.fr/math.php</a>

# Board games to develop mathematical sense

List of math board games:

https://bouncebackparenting.com/fun-math-board-games/

https://www.underdoggames.com/a/blog/games-that-teach-math

### Thanks!

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