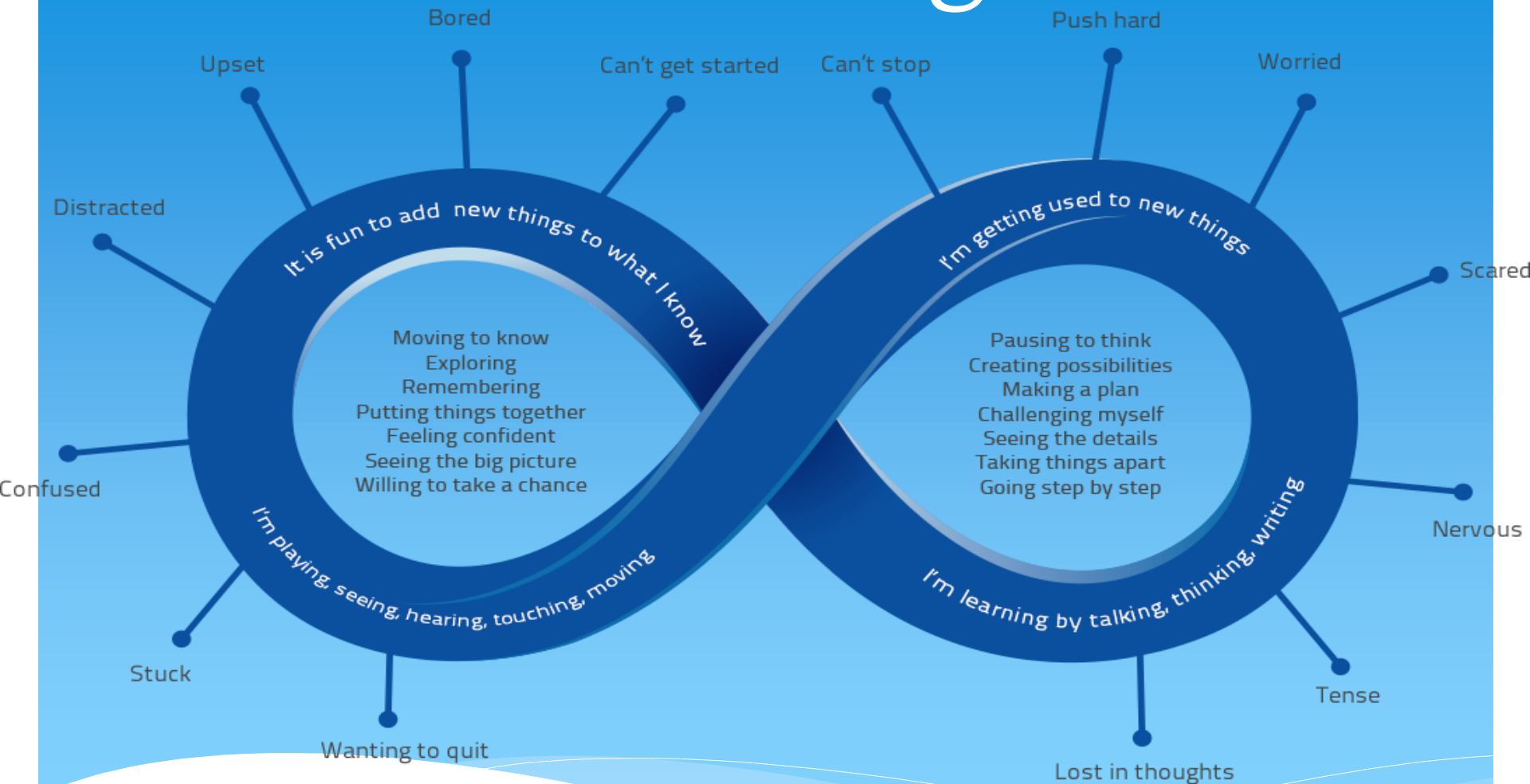


Learning



Presented by Meike Thomsen



Calgary Board
of Education

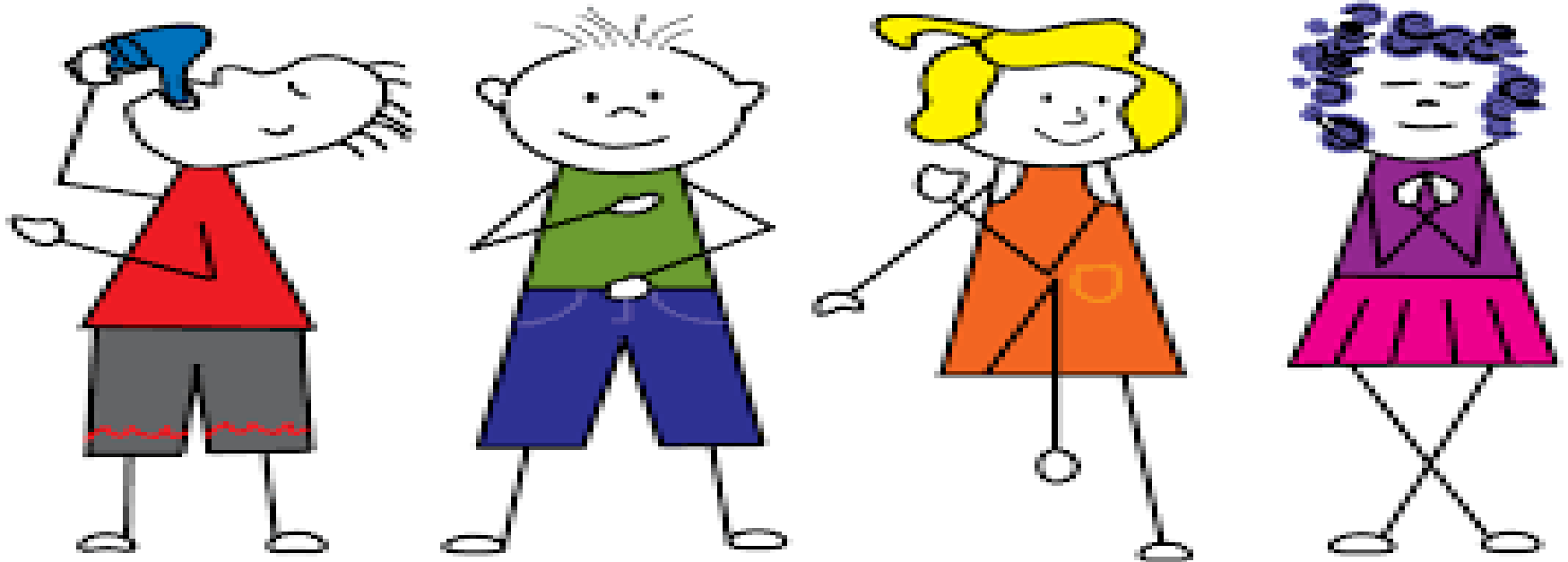
William Reid School March 7, 2019

Brain gym

Cross the middle

Stay hydrated

Be active right before learning



How do children learn best?

- * They learn best through playing games
- * They learn best through patterns
- * Speed prevents information from getting into permanent memory
- * They learn if they have PRODUCTIVE STRUGGLES
 - DON'T help your child!
 - Zone of proximal development

How to Support your Child at Home

- Skip counting → times tables
- Facts up to 20
- Doubling/ halving
- Counting forward and BACK!!
- Counting forward starting at random points (NOT always at 1)
- card games, card games, card games

$$\begin{array}{llll}
 12 \times 4 = \underline{\quad} & 4 \times 4 = \underline{\quad} & 7 \times 4 = \underline{\quad} & 10 \times 4 = \underline{\quad} \\
 1 \times 4 = \underline{\quad} & 2 \times 4 = \underline{\quad} & 11 \times 4 = \underline{\quad} & 6 \times 4 = \underline{\quad} \\
 3 \times 4 = \underline{\quad} & 8 \times 4 = \underline{\quad} & 0 \times 4 = \underline{\quad} & 9 \times 4 = \underline{\quad}
 \end{array}$$

$$\begin{array}{r}
 5 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 9 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 3 \\
 \times 4 \\
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 \end{array}
 \quad
 \begin{array}{r}
 8 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 0 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 11 \\
 \times 4 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 7 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 12 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 6 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 10 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 2 \\
 \times 4 \\
 \hline
 \end{array}
 \quad
 \begin{array}{r}
 1 \\
 \times 4 \\
 \hline
 \end{array}$$

$$\begin{array}{llll}
 \underline{\quad} \times 4 = 20 & \underline{\quad} \times 4 = 8 & \underline{\quad} \times 4 = 28 & \underline{\quad} \times 4 = 16 \\
 \underline{\quad} \times 4 = 4 & \underline{\quad} \times 4 = 40 & \underline{\quad} \times 4 = 0 & \underline{\quad} \times 4 = 44 \\
 \underline{\quad} \times 4 = 36 & \underline{\quad} \times 4 = 24 & \underline{\quad} \times 4 = 12 & \underline{\quad} \times 4 = 32
 \end{array}$$

$$\begin{array}{llll}
 48 \div 4 = \underline{\quad} & 32 \div 4 = \underline{\quad} & 24 \div 4 = \underline{\quad} & 36 \div 4 = \underline{\quad} \\
 4 \div 4 = \underline{\quad} & 16 \div 4 = \underline{\quad} & 40 \div 4 = \underline{\quad} & 12 \div 4 = \underline{\quad} \\
 20 \div 4 = \underline{\quad} & 28 \div 4 = \underline{\quad} & 8 \div 4 = \underline{\quad} & 44 \div 4 = \underline{\quad}
 \end{array}$$

$$\begin{array}{r}
 4 \overline{)12} \\
 4 \overline{)4} \\
 4 \overline{)24} \\
 4 \overline{)16} \\
 4 \overline{)28} \\
 4 \overline{)36}
 \end{array}$$

$$\begin{array}{r}
 4 \overline{)0} \\
 4 \overline{)8} \\
 4 \overline{)32} \\
 4 \overline{)40} \\
 14 \overline{)20} \\
 4 \overline{)44}
 \end{array}$$

$$\begin{array}{llll}
 48 \div 4 = \underline{\quad} & 28 \div 4 = \underline{\quad} & 6 \times 4 = \underline{\quad} & 4 \times 4 = \underline{\quad} \\
 5 \times 4 = \underline{\quad} & 2 \times 4 = \underline{\quad} & 12 \div 4 = \underline{\quad} & 32 \div 4 = \underline{\quad} \\
 4 \div 4 = \underline{\quad} & 36 \div 4 = \underline{\quad} & 10 \times 4 = \underline{\quad} & 11 \times 4 = \underline{\quad}
 \end{array}$$

Point & say answers (DO NOT WRITE ON PAPER)
 Work for 10 min. or twice through each night.
 Return with parent signature when you can
 do this in 4 min.

**Leaving William Reid, grade 4
students have an easier start at
Elboya if:**

- They know facts up to 12×12
- How to open their locker

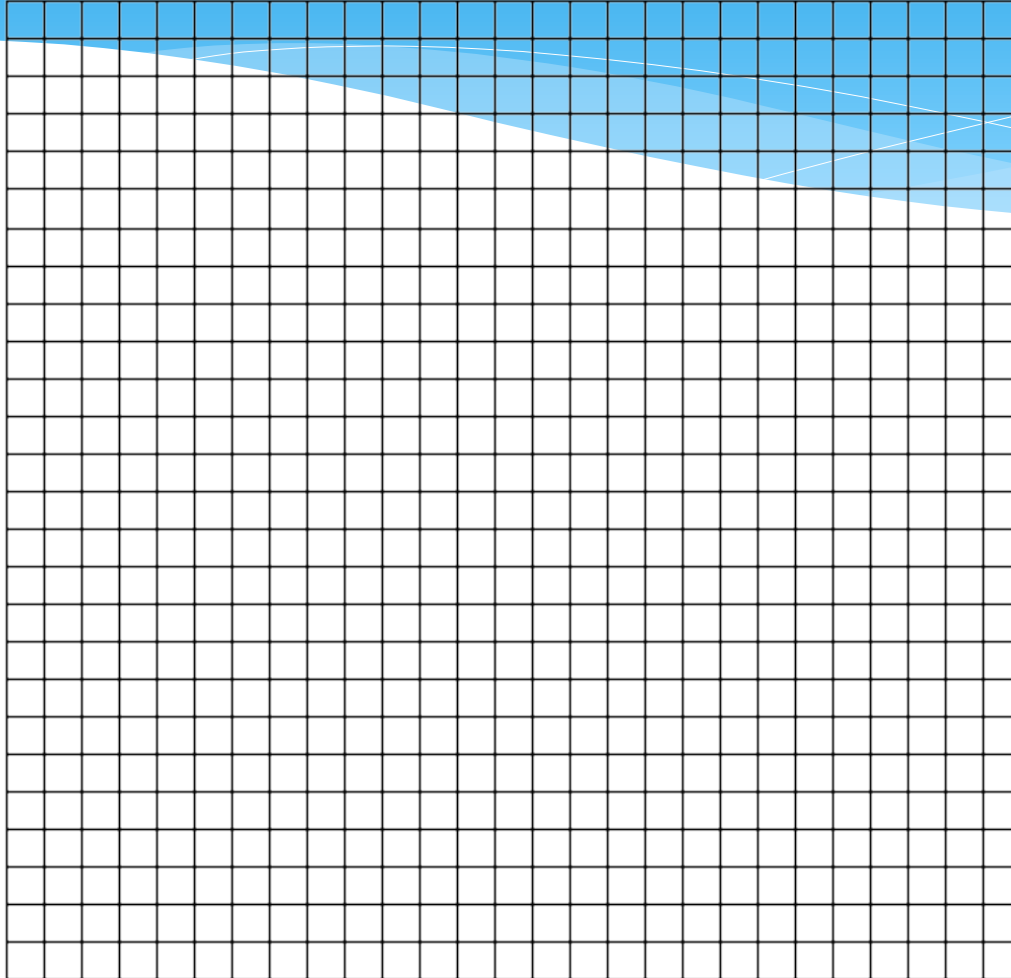
- Flip a card: +1 or - 1 / +2 or - 2

- Doubling and plus 1 or -1

eg: 13 is 6 doubled +1

or: 13 is 7 doubled - 1

Using graph paper



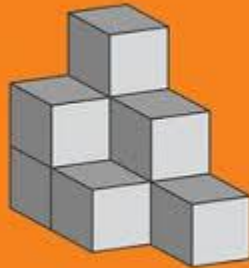
Strategy games – Chess!

Cribbage for younger
students to practice basic facts up
to 15 & 31

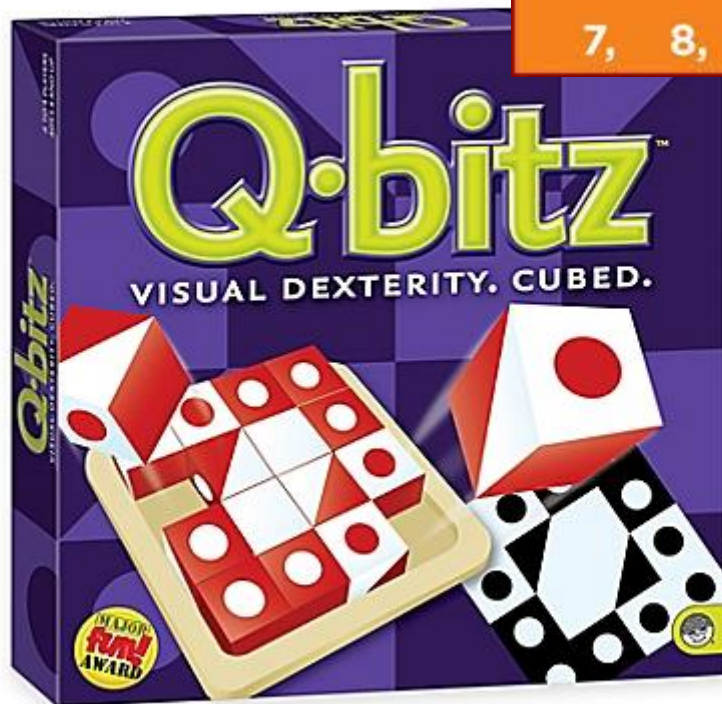


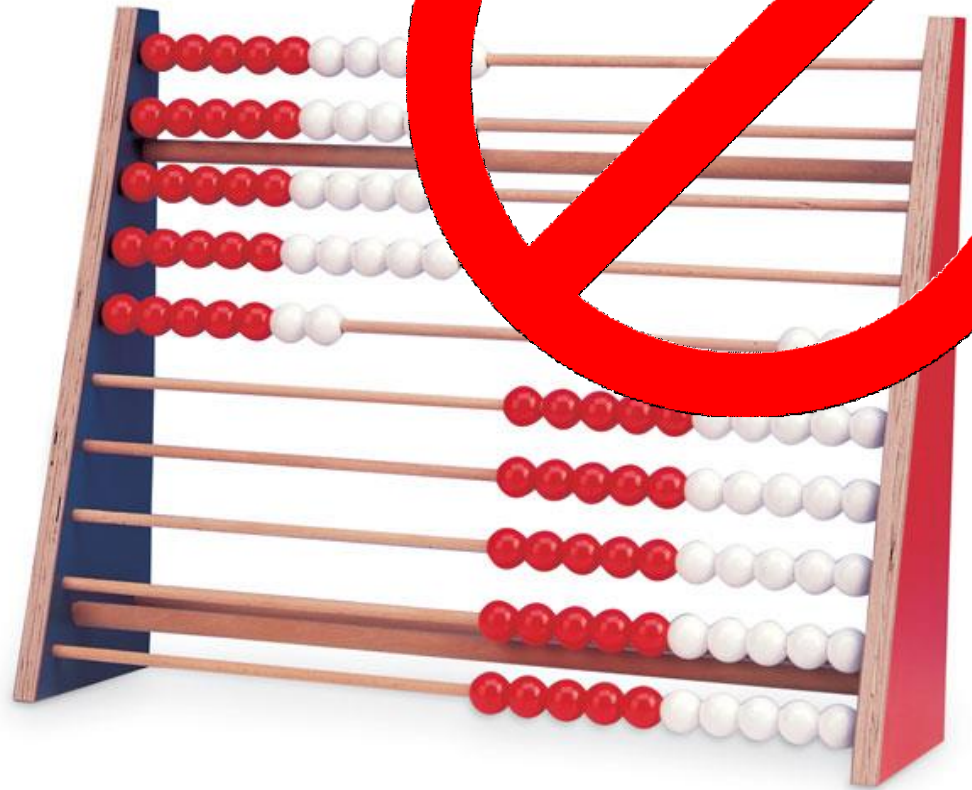
Visual-spatial games: Q-bitz

How many blocks?



7, 8, 9, 10





Hands-on puzzles/blocks vs. computer games

Math in your world:

-architecture

-cooking

-baking

-banking – financial literacy

Good Questions for **MATH TEACHING**

Why Ask
Them
and What
to Ask
[K-6]



Peter Sullivan
Pat Lilburn

Good Questions for **MATH TEACHING**

Why Ask
Them
and What
to Ask
Grades
5-8



Lainie Schuster
Nancy Canavan Anderson

Gr. 3 – SLAs / Gr. 6 – PATs

- Graphs and charts
- 1st Quadrant coordinate pairs – play Battleship!
- **Subtraction** 200-199=
or 20-19 ... **number sense!**
- **Mental math!**

Your turn!

Grab a graph sheet & pencil

**Explore and do the centres:
you will need to find partners
for some of them.**

Have fun!