Elementary Math Focus Afternoon January 26 2018 Grauer Elementary

- 12:30 Welcome Overview and Updates regarding BC Curriculum and Richmond School District Initiatives -Janice Novakowski
- 1:00 Session #1
- 2:00 Session #2



2:55 End of program Prize draw winners to be announced over the PA system – please choose from items on the table in the gym

Please help out by stacking a chair or two at the end of the day in the session rooms and in the gym. Coffee, tea, cookies and fruit will be available in the gym. There is a water filling station just outside of the gym.



Please take some time to view the various displays shared by each school participating in this math focus afternoon.

Looking for resources to support

the financial literacy component of the math curriculum? Curious about the "Talk With Our Kids About Money" day in April?

A representative from the Canadian Foundation for Economic Education will be attending our elementary math focus afternoon and will have resources on display.

Schedule of Sessions

Session #1 – 1:00-1:55pm	Session #2 – 2:00-2:55pm
Using Provocations to Deepen	Creating a Balanced Math Program
Mathematical Thinking (gr 1-5)	(gr 1-4)
with Michelle Hikida	with Michelle Hikida
Favorable Conditions in an Intermediate	Three-Act Tasks (gr 4-7)
Math Class (gr 4-7)	with Gillian Ewart
with Gillian Ewart	
Math for All – Adapting & Modifying (K-7)	Math for All – Adapting & Modifying (K-7)
Starting Your Day with Black Mat Play (K)	Starting Your Day with Black Mat Play (K)
with Marie Thom	with Marie Thom
New Math Routines in French	New Math Routines in French
Immersion (K-3)	Immersion (4-7)
with Carrie Bourne	with Carrie Bourne
Integrating Math & Science	Integrating Math & Science
through Inquiry (grades 4-7)	through Inquiry (grades 4-7)
with Neal Campbell	with Neal Campbell
Rich Investigations (grades 2-7)	Visual Patterns and Visualizing Patterns:
with Fred Harwood	Growing Algebraic Understanding (gr 5-7)
Integrating the iPad in Intermediate (4.7)	Integrating the iPad in Primary (K. 2)
with Chris Lost	with Chris Lost
with Chiffs Loat	with Chills Loat



Session Descriptions and Locations

Session #1 – 1:00-1:55 pm

Starting Your Day with Black Mat Play: Easy to Make Tasks for KindergartenRoom #110Marie ThomCurricular Competencies and ContentIn this session there will be lots of ideas for using black mats and classroommaterials to introduce math concepts such as sorting, counting, patterning,seriating, counting on, subitizing and more. Teachers will receive a packageof templates to support the black mat math materials. Tips for what to look for andways to keep track of what children say and do will be given.

Using Provocations to Deepen Mathematical Thinking (1-5) Multipurpose Room Michelle Hikida Inquiry, Curricular Competencies and Content Provocations are open-ended invitations to provoke. They are intended to provoke interest, questions, theory making, creativity and most importantly deep thinking. Provocations should inspire explorations and discovery. Come and see classroom examples of provocations and hear how and why different provocations are created to deepen student understanding and promote playing with mathematical ideas.

Integrating Math and Science Through Inquiry (gr. 4-7)Room #208Neal CampbellInquiry, Curricular Competencies

What can circle graphs tell us about evolution? How can decimals and energy be studied together? In this session, we will engage in hands-on experiments and explore ways to integrate the Math and Science big ideas and curricular competencies through inquiry.

New Math Routines in French Immersion (K-3)

Carrie Bourne

In this session we will explore and participate in a variety of new, fun, and exciting routines such as Splat!, Cube Conversations, Estimation 180, Clothesline, and Visual Patterns that can be incorporated in the French Immersion classroom. Teachers will have opportunities to connect, collaborate, and communicate with one another, and connections will be made to the BC Math curriculum.

Math for All – Adapting and Modifying

Kyle Greaves, District Support Team

This session is geared towards Classroom Teachers, Resource Teachers and Educational Assistants. During the session, we will discuss effective assessment and planning for ALL students but specifically for students with exceptional needs. In addition, participants are encouraged to come with one or two students in mind so that they will be able to begin to plan math units and lessons to involve ALL

Room #105

Room #207

Curricular Competencies

students. There will be opportunities for participants to share ideas and strategies that they have used successfully in supporting students with exceptional needs.

Rich Investigations (grades 2-7)

Fred Harwood (Math Mentor Teacher) *Curricular Competencies & Communication* Inquiry can be a dynamic way to embed practice of basic skills while engaging students in problem solving, math reasoning and communication. Core and curricular competencies are engaged well within these structures. Come experience and discuss ways to enhance arithmetic skills within inquiry questions. Examples will be from an intermediate classroom but can be adapted to primary.

Favorable Conditions in an Intermediate Math Class (gr 4-7) Room #212

Gillian Ewart *Curricular Competencies and Content* What does a balanced numeracy program look like in an intermediate class? What conditions and routines help students gain a deeper understanding of the concepts while developing positive life-long habits of mind? In this session, I will share some practical ideas and norms that can empower your students as mathematicians and get them excited about learning math.

Integrating the iPad in Intermediate Math (gr 4-7)

Chris Loat *Curricular Competencies, Technology* In this workshop, participants will learn about a number of apps and features that can be integrated in a variety of grade 4-7 Math lessons. We will look at iPad apps, including Shadow Puppet, Skitch, Number Line, Partial Product Finder, and / or Pic Collage, that allow students to demonstrate and share their learning in various ways. We will also examine some built in accessibility features of the iPad (e.g. voice dictation), and different ideas around workflow (how to get the work off the iPad).





Room #209

5

Session #2 – 2:00-2:55 pm

Starting Your Day with Black Mat Play: Easy to Make Tasks for Kindergarten **Room #110** Marie Thom Curricular Competencies and Content In this session there will be lots of ideas for using black mats and classroom materials to introduce math concepts such as sorting, counting, patterning, seriating, counting on, subitizing and more. Teachers will receive a package of templates to support the black mat math materials. Tips for what to look for and wavs to keep track of what children Note: This is a repeat session.

Creating a Balanced Math Program (Grades 1-4) Multipurpose Room

Michelle Hikida Inquiry, Curricular Competencies and Content Mental Math, provocations, mathematical inquiry, problem solving, guided Math, counting collections, games, high yield routines. There are so many rich mathematical opportunities to explore with our students, but how do we balance them all? Come and see some examples of how to incorporate many of these components into a balanced Math program.

Three-Act Tasks in an Intermediate Math Class (gr 4-7) Room #212

Curricular Competencies and Content Gillian Ewart What is a three-act task? How do these rich tasks support mathematical thinking and reasoning and increase engagement and excitement about learning mathematics? In this session I will share resources and examples of three-act tasks that you can use in your intermediate classroom.

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Visual Patterns and Visualizing Patterns: Growing Algebraic Understanding (grades 5-7) Room #210 Fred Harwood (Math Mentor Teacher) Inquiry, Curricular Competencies Multiple representations have grown children's understanding of arithmetic. Connecting growing patterns, pictures, tables, graphs and algebra will also deepen mathematical understanding. We will 'see' how the patterns connect through these various representations in powerful ways.

Integrating the iPad in Primary Math (K-3)

Room #209

Chris Loat *Curricular Competencies, Technology* In this workshop, participants will learn about a number of apps and features that can be integrated in a variety of K-3 Math lessons. We will look at iPad apps, including Shadow Puppet, Skitch, Number Pieces, Number Line, Number Frames, and / or Pic Collage, that allow students to demonstrate and share their learning in various ways. We will also examine some built in accessibility features of the iPad (e.g. voice dictation), and different ideas around workflow (how to get the work off the iPad).

School map and room numbers



Room #105

Curricular Competencies