LESSON PLANS: ONTARIO

Grade 2: Number Sense and Numeration Addition and Subtraction



powered by



Overall Curriculum Expectations:

• Solve problems involving the addition and subtraction of one- and two-digit whole numbers, using a variety of strategies, and investigate multiplication and division.

Specific Curriculum Expectations:

- Solve problems involving the addition and subtraction of whole numbers to 18, using a variety of mental strategies.
- Describe relationships between quantities by using whole-number addition and subtraction.
- Solve problems involving the addition and subtraction of two-digit numbers, with and without regrouping, using concrete materials.

Introduction to Lesson



Teacher Background:

Please review the teacher notes from the eBook. This is located in Mathletics Teacher Console > eBooks > Grade 2/3 > Ribbons > Teacher notes.

Play "3 Ribbons" video on the interactive whiteboard. (This is located in the Teacher column on the far-right side of the screen. This will initiate the thought process for computational learning based on a visual. This is to start a discussion but not to solve the guestion. Students will have the opportunity to solve the question during the lesson.

Ask students for further extension to get them to start thinking how they can solve the problem:

- Do you think that the shortest ribbon could be 80 cm long? Why or
- Do you think that the longest ribbon could be 50 cm long? Why or
- Could one ribbon be 5 cm long? Why or why not? Could one ribbon be twice as long as another?
- What strategy did you use to come up with solutions?
- Once you have a solution, how could you use it to create another one?

II ITEMS NEEDED

- ✓ Interactive whiteboard
- ✓ Teacher/ student Mathletics logins
- ✓ Teacher notes—"3 Ribbons"
- ✓ Student handout—"3 Ribbons"
- ✓ Math journals
- ✓ Computers/mobile devices.

E ASSESSMENTS

- ✓ Observation and participation
- ✓ Reviewing completed "3 Ribbons" student worksheet
- ✓ Reporting results within the Mathletics Teacher Console for curriculum and Live Mathletics results.

ACCOMMODATIONS/ **MODIFICATIONS**

- ✓ Provide students with ribbons for manipulatives.
- ✓ Encourage students to click on the "Something Easier" and "Something Harder" within the Mathletics curriculum activities.

EXTENSION OF LEARNING

- ✓ Problem Solving Games under subtraction
- Curriculum activities
- ✓ Live Mathletics levels 1 and 2



The Lesson



Marian Small's "3 Ribbons" eBook

- Within the "3 Ribbons" eBook in the Teacher Console, click on "3 Ribbons" under "Interactives" on the far right. This can be displayed on the interactive whiteboard. Click on "See question." Discuss some strategies students can use to solve the problem. Teachers can access Problem Solving strategies under eBooks, Problem Solving on the far right of the Grade bar. Click on Problem Solving. There will be three books to choose from. For grade 2, click on Problem Solving Level 1. The strategies discussed in the Problem Solving eBook are Read, plan, work and check; Draw a diagram; Look for patterns; Act it out; Trial and error; Make a list; Estimation, Work backwards; and Open ended. Discuss strategies with students and allow them to work in groups/pairs to solve the problem.
- Reinforcement: Using computers or mobile devices, students complete curriculum activities in the Student Console. Suggested activities: Addition; Addictive addition; Simple Subtraction; Subtraction Facts to 18; Problems; Add and Subtract; 1 More 2 Less; Doubles and Halves to 20.
- Extra-time activity/cross-curriculum activity: Mystery Number—Pick a two-digit number and create hints for students to figure out the number. Have the students create a poster displaying hints on what the number could be. Encourage students to use number sentences, pictures, or words. Teachers can implement rules such as a minimum of 4 hints, you cannot use any numbers from your mystery number, has to be at least a 2-digit number, etc.



Consolidating the lesson



• Have the students reflect in their journals about the lesson. What strategies did they use? Which ones did they find to be helpful to solve this problem? Or create a "What stuck with you today" board. Students write their responses on sticky notes and place them on this board. Review these sticky notes at the end of the week and share the process/thoughts with the class.