LESSON PLANS: ALBERTA

Grade 3: Number

45 MINS

General Outcome:
• Develop number sense.

Specific Outcomes:
• Demonstrate an understanding of multiplication to 5 x 5 by:
   - creating and solving problems in context that involve multiplication
   - modelling multiplication using concrete and visual representations, and recording the process symbolically
   - relating multiplication to division.

Introduction to Lesson   10 MINS

Teacher Background:

Review the teacher notes from eBooks "Build a Number" located in

   Mathletics Teacher Console > eBooks > Year 3 > Build a Number.

Click on the eBook and options will show up on the far right. Click on the Teacher Notes.

Play video from "Build a Number" on your interactive whiteboard for the students. This is located in the Mathletics Teacher Console under eBooks.

During the video, pause and discussed the key words that are underline in red. If students are not aware of the fraction 1/4, please clarify. This is to start a discussion but not to solve the question. Students will have the opportunity to solve the question during the lesson.

Ask students for further extension to get them to start thinking about how they can solve the problem:
   • Were you free to choose the number of flats?
   • How about the number of rods?
   • Why did the number of rods have to be even?
   • What did you notice about the number of unit blocks?

ITEMS NEEDED
✔ Interactive whiteboard
✔ Mathletics teacher login
✔ Teacher notes from "Build a Number"
✔ Base ten blocks
✔ Student handout for "Build a Number"
✔ Math journals
✔ Computers/mobile devices

ASSESSMENTS
✔ Observation and participation
✔ Reviewing completed "Build a Number" student worksheet
✔ Reporting results within the Teacher Console of Mathletics for curriculum

ACCOMMODATIONS/ MODIFICATIONS
✔ Provide manipulatives.
✔ Encourage students to click on "Something Easier" and "Something Harder" within Mathletics curriculum activities.
✔ Teacher can work with a small group of students.

EXTENSION OF LEARNING
✔ Rainforest Maths activities within Grade 3, Number
✔ Curriculum activities
✔ Live Mathletics Level 3–4

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The Lesson   🕐 30 MINS

eBooks: Build a Number

- Provide students with the "Build a Number: student handout. Teachers can provide students with the base ten blocks sets as well. Have the students come up with as many possible solutions as they can. If students need help with ways to solve this problem, teachers can review the Problem Solving booklets within eBooks. 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.

- On the interactive whiteboard bring up the "Build a Number" interactive for the class by going to **Teacher Console > eBooks > Year 3 > Build a Number** and clicking on the interactive on the far right. The interactive will display the base ten blocks on the left side; double click on each one and it will be added to the center of the screen. Have the students come up and share some of the solutions they found, along with a strategy they used to solve this problem. As each group comes up and shares, click the "store" button, which will store the solutions on the right side. After all the groups have shared, review all the solutions.

- **Reinforcement:** Use computers or mobile devices. Students complete curriculum activities in the Student Console. Suggested activities: Model Numbers, How many Blocks?, Place value 2, Understanding Place Value 1, Multiplication Arrays, Fill the Jars.

- **Extra-time activity/cross-curriculum activity:** Number Cubes—Students can play a game using 2 or 3 dice. Students roll the dice and they decide what symbol they will use to add or multiply. They will display the answer using the base ten blocks and have the partner figure out what symbol they used. For example, a student rolls three dice and gets the number 3, 4, and 2. Students can add or multiply the numbers and display the total using the base ten blocks.

After the lesson   🕐 5 MINS

- 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.
- Teachers can review these sticky notes at the end of the week and share the process/thoughts with the students.