LESSON PLAN

Year 3: Number



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General Outcome:

•Solve problems using concrete objects and pictorial representations, including those involving numbers, quantities and measures.

Specific Outcomes:

- •Use known multiplication facts and derive related division facts
- •Calculate fractions of amounts
- •Model problems using concrete resources
- •Explain methods using mathematical vocabulary

Starter



10 MINS

On the interactive whiteboard, play the video "Build a Number" to introduce the problem located in Lessons, "Year 3: Numbers". During the video, pause and discuss the key words, underlined in red. Ensure pupils understand the fraction 1/4. This is an opportunity to start a discussion but not to solve the question as students will have the opportunity to do this during the main activity.

To support students ask:

- Will you use more flats or rods? Why?
- If you chose one flat how many rods would you use? Why?
- Is the number of units blocks more or less than the number or rods? Why?
- Why will you usually need to use more than ten unit blocks?

To extend the discussion ask students:

- Are you free to choose the number of flats?
- Are you free to choose the number rods?
- Why does the number of rods have to be even?
- What did you notice about the number of unit blocks?

. ITEMS NEEDED

- ✓ Interactive whiteboard
- ✓ Mathletics teacher and student logins
- ✓ 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
- Teacher can work with a small group of

EXTENSION OF LEARNING

- ✓ Rainforest Maths activities within Year
- Curriculum activities
- \checkmark Live Mathletics Levels 3 and 4



Teaching/Main Activity



eBooks: Build a Number

- Provide students with the "Build a Number" printable problem. Teachers can provide students with the base ten blocks sets as well. Ask students to come up with as many possible solutions as possible. 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 eBooks are; Draw a Diagram; Look for Patterns; Act it Out; Make a list; Work Backwards; Trial and Error; and Logical Reasoning.
- Display the "Build a Number' interactive whiteboard. Double click on each base ten block on the left side and it will be added to the centre of the screen. Ask students to 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: Using computers or mobile devices, students complete curriculum activities in the Student Console. Suggested activities: Model Numbers, Place Value to Thousands, Place Value Partitioning, Place Value 2, Fraction Fruit Sets 1, Frog Jump Multiplication.
- Extension activity/cross-curriculum activity: Number Cubes—Students can play a game using 2 or 3 dice. Students roll the dice and they are to 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, 2. Students can add or multiply the numbers and display the sum using the base ten blocks.



Plenary



- Ask students to reflect on their learning. What strategies did they use? Which ones did they find 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.
- These can be reviewed at the end of the week and the process/thoughts can be shared with your students.

