

Lesson Title	Divisibility: Rules for 8		
Essential Question	How can I decide if a number is divisible by 8?		
Subject/ Grade Level	Grade 5 math	Time Duration	42 min 10:12 - 10:54
Unit (Organizing Ideas)	Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.	Teacher	Abbey Ford

OUTCOMES FROM ALBERTA PROGRAM OF STUDIES

Learning Outcome:	Students determine divisibility of natural numbers.
KUSP's	<p>KNOWLEDGE:</p> <ul style="list-style-type: none"> • A divisibility test can be used to determine factors of a natural number. • Division by zero is not possible. <p>UNDERSTANDING:</p> <ul style="list-style-type: none"> • A number is divisible by another number if it can be divided with a remainder of 0. <p>SKILLS & PROCEDURES:</p> <ul style="list-style-type: none"> • factors of natural numbers using divisibility tests.

LEARNING OBJECTIVES

Students will: use divisibility rules to discover if a number is divisible by 8.

MATERIALS NEEDED FOR LESSON

- [Divisibility Rule 8 Slides](#)
- Math booklet for each student
- Pencil for each student
- Print out of [Divisibility Rules worksheet](#) for each student

PROCEDURE

Lesson 1		Time
<i>Set up (Before students arrive)</i>	<ul style="list-style-type: none"> • Prepare the divisibility slides on computer. • Display the intro “divisibility rule 8”. slide from the Divisibility Rule 8 Slides • Prepare the pdf of their workbook on computer. • Put loose leaf at the front of the room for students to complete their long division on. 	
<i>Attention Grabber</i>	<ul style="list-style-type: none"> • Welcome students into class • Ring the chimes with a countdown to bring students attention tot the front. • Tell students what they need to have on their desk before we begin. (Math book, divisibility rule page, pencil and an eraser) • Tell students to raise their hand and ask “what is divisibility?” (This is a review question). 	5 minute
<i>Transition to Body</i>	<ul style="list-style-type: none"> • Review all of the previous chants for the rules for 2,3,4,5, and 6. 	5 minute
<i>Body (Google Slides)</i>	<p>Rule for “8”</p> <ul style="list-style-type: none"> • Explain the rule off of the slides. • Teach students the chant that goes with the number 8. 	15-20 minutes

	<ul style="list-style-type: none"> • Have students write this rule on the “8” section of their divisibility rules page. Tell them to put their hands on their head when finished. • Do the chants all the way from the beginning with adding on the rule for 8. <p>Let’s practice</p> <ul style="list-style-type: none"> • Write the multiples of 8 on the board with the class • Review long division explaining dad-divide, mom-multiply, sister-subtract, brother-bring down. • Write these rules (DMSB) on the board. • Practice using 675824 and writing it on the board. Remember to only use 824 and to draw arrows when bringing the number down. • Ask students “what next?” Along the way to keep their engagement. • Repeat process for 8978950 and discuss what a remainder is (relate is back to our divisibility definition). <p>Fist to five – formative assessment</p> <ul style="list-style-type: none"> • Ask students to give a fist-to-five on how they feel about they rule for 8. • Review the rule for 8 chant one more time before they complete their worksheet. <p>Todo:</p> <ul style="list-style-type: none"> • Put page 9 on the board and briefly go through how to complete each question. • Tell them to grab a piece of loose leaf if they need more space to complete their long division. • Write what to do afterwards on the white board. 	
<i>Work time</i>	<ul style="list-style-type: none"> • Walk around to formatively assess if students are understanding the rule. 	10 minutes

	<ul style="list-style-type: none">• Check-in with students who displayed a 3 or lower in their fist-to-five.	
<i>Closure</i>	<ul style="list-style-type: none">• Give students a 1-minute warning to finish up the last question they are on.• Regain their attention.• Go through all of the rule chants (2,3,4,5,6,8).• Tell students to put away their math books and to put their hands on their head when they have their math books away.	2 minute