Topic 5 OVERVIEW

TOPIC FOCUS: Focus on developing understanding of finding whole-number quotients and remainders with up to four-digit dividends and 1 digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Learners can use a variety of models to connect division of greater numbers to the meanings of division, the Distributive Property, and strategies such as partial quotients and sharing. Mental math and estimation should be used to determine if an answer is reasonable.

ESSENTIAL QUESTION(S): How can mental math be used to divide? How can quotients be estimated? How can the steps for dividing be explained?

STANDARDS: The Major focus standards for this topic are **4.NBT.B.6** *Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors,* and **4.OA.A.3** *Solve multi-step whole-number word problems using the four operations, including problems in which remainders must be interpreted.*

Topic 5 has a 3-Act Task that should be included into the lesson sequence after lesson 5-7.

ASSESSMENT: **4.NBT.B.6** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, standards are only assessed at the end of Topic 5, so the Topic 5 Assessment should be used summatively for those standards. **4.OA.A.3** *Solve multi-step whole-number word problems using the four operations, including problems in which remainders must be interpreted* are addressed in later topics, so the information from the Topic 5 Assessment should be used formatively for those standards.

MANIPULATIVES: Whiteboards, Base ten blocks, Magnetic Base Ten Teacher Set

REQUIRED ASSESSMENTS	
Resources for Formative and Summative Assessment from enVision Mathematics	Pre-Assessment: Review What you Know ● Use item analysis to identify MDIS lessons Topic 5 Review ● Online Topic 5 Assessment (TE pg 218A): may be projected and used as a review. ● Topic 5 Performance Task (TE pg 219-220 #2): to be used as guided instruction with the whole group. Not to be used as an assessment at this time.

Pocatello/Chubbuck School District #25

4th Grade **Topic 5: Use Strategies and Properties to Divide by 1-Digit Numbers** **Pacing: 13 Days**

	Topic 5 Assessment ● Topic 5 Assessment Practice(TE pg 215-218) Administer as a summative assessment for 4.NBT.B.6. Use the assessment formatively for 4.OA.A.3.

STANDARDS The standards are clustered with Learning Intentions and Success Criteria (LI/SC) and are identified to provide coherence in teaching and learning. **Students should spend the large majority of their time on the major work of the grade. Major clusters (□) address the most important standards at that grade level. Supporting clusters (△) are strongly connected to the content of the major clusters, and additional clusters (⍰) address other content to be taught at that grade level.**	**LEARNING INTENTION** LI Identified on Math Background: Focus pg 165E	**SUCCESS CRITERIA** SC identified in Topic Planner - math objectives
⬜ **4.NBT.B.6a** Use strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. ⬜**4.NBT.B.6b** Illustrate and explain the calculation by using rectangular arrays, area models, and/or equations. ⬜**4.OA.A.3a** Represent these problems using equations with a letter standing for the unknown quantity. ⬜**4.OA.A.3b** Assess the reasonableness of answers using mental computation and estimation strategies, including rounding.	We are developing an understanding of finding whole-number quotients and remainders with up to four-digit dividends and 1-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.	5-1: I can use mental math and place-value strategies to divide multiples of 10 and 100 by 1-digit divisors. 5-2: I can use compatible numbers to estimate quotients. 5-3: I can use place-value patterns and division facts to estimate quotients for 4-digit dividends. 5-4: I can solve division problems and interpret remainders. 5-5: I can use partial quotients to divide. 5-6: I can use partial quotients and place-value understandings to divide with greater dividends.

		5-7: I can use place value and models to divide 2- and 3-digit numbers by 1-digit numbers. 5-8: I can continue to use place value and sharing to divide 2- and 3-digit numbers by 1-digit numbers. 5-9: I can choose a strategy to divide that follows a series of steps to break division into simpler calculations. 5-10: I can use previously learned concepts and skills to model and solve problems.