Lesson Plan

Teacher:	Wardensky	Grade Level and Subject:	Math and Language Arts	Time Frame:	45 minutes

SOL Objectives

Math 4.3b The students will round decimals to the nearest whole number

Math 4.3a The student will demonstrate fluency with multiplication facts through 12 × 12, and the corresponding division facts

Math 4.15 The student will identify, describe, create, and extend patterns found in objects, pictures, numbers, and tables.

Language Arts 4.6 The student will read and demonstrate comprehension of nonfiction texts.

Essential Questions	Learning Objectives	Assessments
Students will work together to solve 4 locks to complete the Asteroid Collision digital breakout. Problems include: ● Color Pattern Lock ● Directional Lock (Following step by step directions) ● Multi-step Math Problem ○ Multiplication ○ Rounding decimals and whole numbers ● Reading Comprehension Text and Comprehension Quiz	The students will work in collaborative groups to "Breakout" one of the Native American tribes by finding and working to unlock the 4 locks to breakout with at least 50% success.	Teacher observation: ● Working in Collaborative group ● Use of hint cards (What kind of questions are they asking?) ● Breakout

Instructional Procedures	Differentiated Activities and Strategies
The teacher will: ● Explain the rules of a digital breakout to students and teacher. Making sure to explain that anything can be a hint. (Read, Read, Read!) See attached sheet for how to implement a digital breakout. ● Divide students into cooperative groups of 2 or 3 ● Pass out hint cards and explain how to use them. (2 or 3 per group) ● Use iStation to show QR code then timer for the breakout ● Start the digital breakout ● Walk around and give hints if students have hint cards, otherwise offer no help. ● Debrief after the digital breakout is over. The students will: ● Scan the QR code with iPads and select "go online" ● Students work in a collaborative group to solve the 4 different locks to "Breakout" ● Celebrate your successes and failures.	● Students will work at their own pace to complete the digital breakout with their group. ● If a student can't work with a group he can work alone. .

Lesson Plan

	Teacher Checklist
	☒ Critical thinking / Problem-solving ☒ Communication / Collaboration ☐ Transformative Connection ☐ Project Based Learning ☒ Higher Order Thinking Questions (Analytical, Synthesis, Interpretive, Evaluative) Notes:

Resources and Technology Connections

Digital Breakout website: Asteroid Collision - https://sites.google.com/view/asteroidcollision4and5/home
iPads – 2 or 3 students per iPad
QR Code Reader App
Desktops – if needed
iStation
PPT of QR Codes
Digital Breakout Vault: https://sites.google.com/view/digitalbreakoutvault/home
Hint Cards
Paper & Pencils or Dry Erase boards and marker
Online timer: https://www.online-stopwatch.com/