Division With Remainders

Grade 5 – Mathematics

Division With Remainders

Lesson Details

Grade Level:	5	Curriculum Links:	Mathematics	Time Needed:	30 minutes
Learning Goal		To gain practice and confidence in solving division with remainders problems, while learning information about turtles.			
Success Criteria		By the end of this lesson, students will have successfully completed the worksheet.			
Specific Expectations		*Number Sense and Numeration* - Solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies. *Operational Sense* - Use estimation when solving problems involving the addition, subtraction, multiplication, and division of whole numbers, to help judge the reasonableness of a solution.			
Materials Needed		Worksheet (attached), Pencil, Calculator (optional), Extra Paper (optional).			

Lesson Description

Overview	Students will solve division problems with remainders while completing a fun activity.
Activity	1. Hand out the worksheet to the students. 2. Students will complete the worksheet individually. 3. Optional: As a class, take up the worksheet.
Background Information	Wetlands are crucial to the health of water systems. If a wetland was part of the human body, it'd be known as our kidneys. They filter water and regulate the distribution of its flow. Without wetlands, bacteria and other pollutants would flow directly into our lakes and rivers. It is important to note that wetlands are also a home to many species, not just plants. Turtles are most often found in wetlands. They are considered keystone species, in other words, incredibly valuable and integral to the health of the water. Likewise, wetlands provide turtles a home and contribute to their overall well-being. Wetlands teach us the relationships between the environment, plants, and animals. Wetlands have systems to filter water, which benefits turtles. In return, turtles provide valuable services to wetlands. When turtles are young, they consume small fish and mammals, and dead carcasses. As they get older, turtles eat mainly vegetation and seeds – then when they roam, they spread these seeds creating new vegetation that will filter the water.
Blacklist Masters	- Worksheet (attached) - For more information, please visit https://www.turtleguardians.com/
Place-Based Learning	Students can relate what they have learned about turtles to their local wildlife.
Inquiry-Based Learning	Using **Structured Inquiry**, students will complete the worksheet. Ask the students:

Lesson Description

	• What is a keystone species? • How do wetlands and turtles work together to provide a healthy ecosystem?
Turtle Stories	Try your hand at making new math problems for others to solve. Students are encouraged to share what they have learned and any new problems created on the Turtle Stories website, found here: https://www.turtlestories.ca/
Turtle Guardian Program Links	After completing **Level 1** (Ontario Turtle Identification) of the **Turtle Guardian Program**, students can move onto **Level 2** (Wetland Watchers). In this level the students learn how to monitor wetland habitats, contribute to knowledge of wildlife-biology in the region, and are able to adopt a wetland to monitor for turtles, birds, and other animals. For more information, please visit https://www.turtleguardians.com/what-is-a-turtle-guardian/

My Notes

Division With Remainders

Jeremiah the Snapping Turtle needs help! He is learning about his role in a wetland and is trying to complete the word problem below to figure it out – but he's having a hard time solving the math problems. Can you help?

Each of the division problems below has a remainder (r). Match the <u>remainder</u> from each problem <u>along with the letter</u> beside your answer to the numbers underneath the blanks to help Jeremiah. As an example, the first one has been done for you.

108 r = 4	307 r = 1	218 r = 0	11 r = 37	16 r = 14
6 ⟌652 = S	2 ⟌615 = Y	2 ⟌436 = P	45 ⟌532 = V	15 ⟌254 = K

25 r = 10	91 r = 2	14 r = 15	46 r = 9	21 r = 17
21 ⟌535 = L	5 ⟌457 = N	20 ⟌295 = G	12 ⟌561 = U	25 ⟌542 = D

110 r = 6	12 r = 25	12 r = 11	43 r = 8	15 r = 5
9 ⟌996 = E	26 ⟌337 = I	12 ⟌155 = O	11 ⟌481 = H	7 ⟌110 = R

13 r = 12	96 r = 7	22 r = 19	27 r = 13	115 r = 3
19 ⟌259 = B	8 ⟌775 = W	22 ⟌305 = C	16 ⟌445 = T	5 ⟌578 = A

Turtles are considered a <u>K</u> <u>E</u> <u>Y</u> <u>S</u> <u>T</u> <u>O</u> <u>N</u> <u>E</u> <u>S</u> <u>P</u> <u>E</u> <u>C</u> <u>I</u> <u>E</u> <u>S</u> , in other words,
$\quad\quad\quad\quad\quad\quad\quad\quad\quad$ 14 6 1 4 13 11 2 6 4 0 6 19 25 6 4

incredibly <u>V</u> <u>A</u> <u>L</u> <u>U</u> <u>A</u> <u>B</u> <u>L</u> <u>E</u> and <u>I</u> <u>N</u> <u>T</u> <u>E</u> <u>G</u> <u>R</u> <u>A</u> <u>L</u> to the
$\quad\quad\quad\quad$ 37 3 10 9 3 12 10 6 $\quad\quad$ 25 2 13 6 15 5 3 10

<u>H</u> <u>E</u> <u>A</u> <u>L</u> <u>T</u> <u>H</u> of the <u>W</u> <u>A</u> <u>T</u> <u>E</u> <u>R</u> in a <u>W</u> <u>E</u> <u>T</u> <u>L</u> <u>A</u> <u>N</u> <u>D</u> .
8 6 3 10 13 8 $\quad\quad\quad\quad$ 7 3 13 6 5 $\quad\quad\quad$ 7 6 13 10 3 2 17

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$2 \overline{)436} = $ P , r =

$45 \overline{)532} = $ V , r =

$15 \overline{)254} = $ K , r =

$21 \overline{)535} = $ L , r =

$5 \overline{)457} = $ N , r =

$20 \overline{)295} = $ G , r =

$12 \overline{)561} = $ U , r =

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$7 \overline{)110} = $ R , r =

$19 \overline{)259} = $ B , r =

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$16 \overline{)445} = $ T , r =

$5 \overline{)578} = $ A , r =

Turtles are considered a __ __ __ **S** __ __ __ __ **S** __ __ __ __ __ __ **S** , in other words,
14 6 1 4 13 11 2 6   4 0 6 19 25 6 4

incredibly __ __ __ __ __ __ __ __ and __ __ __ __ __ __ __ __ to the
37 3 10 9 3 12 10 6   25 2 13 6 15 5 3 10

__ __ __ __ __ __ of the __ __ __ __ __ in a __ __ __ __ __ __ __ __ .
8 6 3 10 13 8   7 3 13 6 5   7 6 13 10 3 2 17