

Title: Ecosystem Division	Grade: 5th Grade
Content: Science & Math	Duration: 15-20 minutes

<p>Standard:</p> <ul style="list-style-type: none"> ● 5.NBT.6: Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.
<p>Objective: Students will create long division story problems that are related to the different types of ecosystems.</p>
<p>Materials:</p> <ul style="list-style-type: none"> ● Paper
<p>Introduction Description: Each student will practice writing long division story problems that are related to ecosystems, plants, or animals.</p>
<p>Steps:</p> <ul style="list-style-type: none"> ● You will make up 2-3 division story problems that go along with any ecosystem. <ul style="list-style-type: none"> ○ A division problem that has a 2 digit divisor and 4 digit dividends. See attachment for help. <ul style="list-style-type: none"> ■ Story problems must be written in complete sentences. <ul style="list-style-type: none"> ● Check capitalization ● Check capitalization ● Check grammar Punctuation ■ Under each story you must complete the division problem.
<p>Adaptations:</p> <ul style="list-style-type: none"> ● Struggling with division, use one digit divisor or 3 digit dividend. ● Choose whichever method you are the most comfortable.
<p>Finished Product: 2-3 completed long division story problem.</p>

Division

5.NBT.6

Quotient-The answer to the division problem

11 R 10

12) 142

Divisor-The number doing the dividing

Dividend-The number being divided

There are 2,345 pieces of fresh fruit on a plant. If each hippopotamus each eats 22 pieces, how many can each of them have before all fruits are gone?

$$\begin{array}{r} 106 \\ 22 \overline{) 2345} \\ \underline{-22} \\ 14 \\ \underline{-0} \\ 145 \\ \underline{-132} \\ 13 \end{array}$$

$$\begin{array}{r} ① 22 \\ ② + 22 \\ \hline 44 \\ ③ + 22 \\ \hline 66 \\ ④ + 22 \\ \hline 88 \\ ⑤ + 22 \\ \hline 110 \\ ⑥ + 22 \\ \hline 132 \end{array}$$

Too much → 134

Answer:
106 ¹³/₂₂
or
106 R 13

Each hippopotamus can have 106 whole fruits.

Standard Division

5.NBT.6

$$\begin{array}{r} 11 \text{ R } 10 \\ 12 \overline{) 142} \\ \underline{-12} \\ 22 \\ \underline{-12} \\ 10 \end{array}$$

Remainder → 10

Partial Quotients

5.NBT.6

$$\begin{array}{r} 11 \text{ R } 10 \\ 12 \overline{) 142} \\ \underline{-120} \\ 22 \\ \underline{-12} \\ 10 \end{array}$$