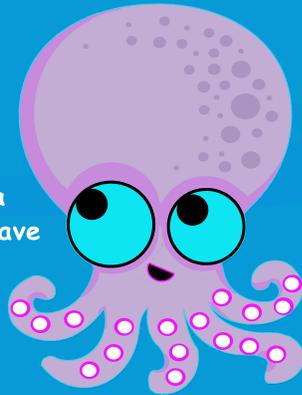


The Quiet Adventures of Iggy the Introverted Inkapus

Lesson 2

"I may not talk a lot, but I sure have a lot to say"

~Iggy, *Good Friends Are Hard to Shake*



Sea Creature Math Fun

PRACTICE MEASUREMENT AND ADDITION WITH IGGY AND FRIENDS!

INSTRUCTION STEPS

1. Open the lesson by reading *Good Friends are Hard to Shake*.
2. When finished, ask students to repeat key details from the text related to counting and cardinality.
3. For example, ask students to answer the following questions, referencing illustrations in the book to guide student answers:

- How many characters are in the story?
- Which character is the biggest in size? Which is the smallest?

- Which sea creature has the greatest number of spots on his or her body? Which has the least number of spots?
2. Next, distribute the handout "How Big Are Iggy and Maze?" Make sure each student has a ruler or divide the class into small groups and have them work together to measure each sea creature.
 3. Invite volunteers to share their answers and review with students that while Iggy is longer than Maze, Maze is actually wider than Iggy.
 4. After the activity, circle back to the

story and show students the pages in the end of the book when Iggy retreats to his cave. Explain that at first it is just Iggy in the cave, but then some of his friends show up. How many sea creatures join Iggy in the cave?

(Answer: 4)

5. Show students that Iggy (1) plus his friends (4) equals 5 total sea creatures in the cave.

6. Close the lesson by distributing "Picture Addition with Iggy" and have students practice their addition skills. Alternatively, this handout may be assigned as homework and reviewed during the next math session.

ABOUT THIS LESSON

Objective: To practice counting, cardinality, measurement, and addition

Time: 45 minutes

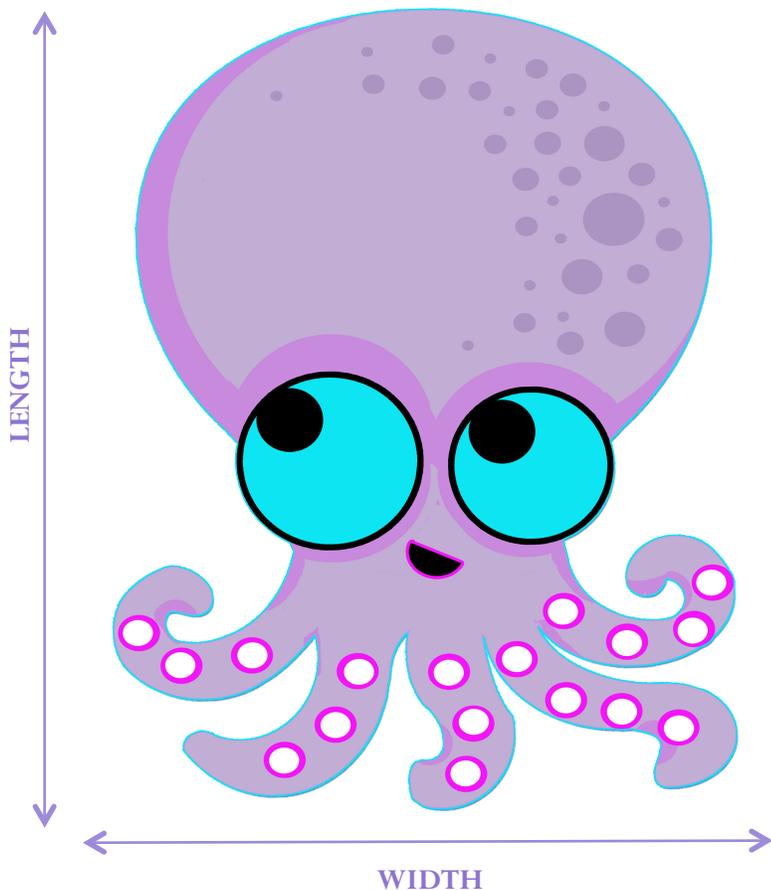
Supplies: *Good Friends are Hard to Shake* by Kristen Maxwell (ISBN 978-0-9907453), "How Big Are Iggy and Maze?" handout, "Picture Addition with Iggy" handout, rulers

Education Standards: Common Core Math and ELA, see page 4



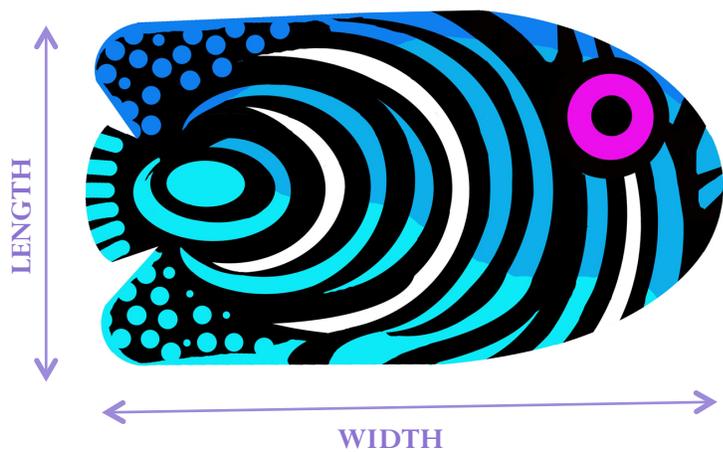
HOW BIG ARE IGGY AND MAZE?

Using a ruler, measure the length and width of Iggy and his friend Maze.



How many inches long is Iggy? _____

How many inches wide is Iggy? _____



How many inches long is Maze? _____

How many inches wide is Maze? _____

PICTURE ADDITION WITH IGGY

Help Iggy add the fish below. Write your answers in the boxes.



$$\begin{array}{c}
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish}
 \end{array}
 +
 \begin{array}{c}
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish}
 \end{array}
 =
 \boxed{}$$

$$\begin{array}{c}
 \text{Zebra fish} \\
 \text{Zebra fish} \\
 \text{Zebra fish} \\
 \text{Zebra fish}
 \end{array}
 +
 \begin{array}{c}
 \text{Zebra fish} \\
 \text{Zebra fish}
 \end{array}
 =
 \boxed{}$$

$$\begin{array}{c}
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish} \\
 \text{Yellow fish}
 \end{array}
 +
 \begin{array}{c}
 \text{Zebra fish} \\
 \text{Zebra fish} \\
 \text{Zebra fish} \\
 \text{Zebra fish}
 \end{array}
 =
 \boxed{}$$

EDUCATION STANDARDS: Common Core Math K–2
<http://www.corestandards.org/Math/>

Kindergarten:

- CCSS.MATH.CONTENT.K.CC.A.1: Count to 100 by ones and by tens.
- CCSS.MATH.CONTENT.K.CC.A.3: Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- CCSS.MATH.CONTENT.K.CC.B.4: Understand the relationship between numbers and quantities; connect counting to cardinality.
- CCSS.MATH.CONTENT.K.CC.B.4.A: When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- CCSS.MATH.CONTENT.K.CC.B.4.B: Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- CCSS.MATH.CONTENT.K.CC.B.4.C: Understand that each successive number name refers to a quantity that is one larger.
- CCSS.MATH.CONTENT.K.CC.B.5: Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
- CCSS.MATH.CONTENT.K.CC.C.6: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- CCSS.MATH.CONTENT.K.CC.C.7: Compare two numbers between 1 and 10 presented as written numerals.
- CCSS.MATH.CONTENT.K.OA.A.1: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- CCSS.MATH.CONTENT.K.OA.A.2: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- CCSS.MATH.CONTENT.K.OA.A.4: For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- CCSS.MATH.CONTENT.K.OA.A.5: Fluently add and subtract within 5.
- CCSS.MATH.CONTENT.K.MD.A.1: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- CCSS.MATH.CONTENT.K.MD.A.2: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. *For example, directly compare the heights of two children and describe one child as taller/shorter.*

Grade 1:

- CCSS.MATH.CONTENT.1.OA.A.1: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

TEACHER TIP

For added fun, have students measure how tall they are after completing the "How Big Are Iggy and Maze?" handout. Have students compare their length to Iggy and Maze and calculate how much longer they are than each character.



EXTENSION ACTIVITIES

Sea Creature Creations

Give students art supplies and allow them to create their own sea creatures. Compare students' sea creatures with one another and determine which creature is the biggest, smallest, widest, and tallest. Challenge students to work together to place the sea creatures in order from smallest to largest or largest to smallest.

Recreate Iggy

Have students draw a replication of Iggy with the correct number of arms (5) and correct number of spots on his arms (17) and head (32).

- CCSS.MATH.CONTENT.1.OA.C.5: Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).
- CCSS.MATH.CONTENT.1.OA.D.7: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.
- CCSS.MATH.CONTENT.1.NBT.A.1: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.
- CCSS.MATH.CONTENT.1.NBT.C.4: Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- CCSS.MATH.CONTENT.1.MD.A.1: Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- CCSS.MATH.CONTENT.1.MD.A.2: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps

Grade 2:

- CCSS.MATH.CONTENT.2.OA.A.1: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
- CCSS.MATH.CONTENT.2.NBT.B.5: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
- CCSS.MATH.CONTENT.2.MD.A.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- CCSS.MATH.CONTENT.2.MD.A.2: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
- CCSS.MATH.CONTENT.2.MD.A.3: Estimate lengths using units of inches, feet, centimeters, and meters.
- CCSS.MATH.CONTENT.2.MD.A.4: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

EDUCATION STANDARDS: Common Core English Language Arts K–2 (<http://www.corestandards.org/ELA-Literacy/>)

Kindergarten:

- CCSS.ELA-LITERACY.RL.K.1: With prompting and support, ask and answer questions about key details in a text.
- CCSS.ELA-LITERACY.RL.K.3: With prompting and support, identify characters, settings, and major events in a story.
- CCSS.ELA-LITERACY.RL.K.7: With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts).
- CCSS.ELA-LITERACY.RL.K.10: Actively engage in group reading activities with purpose and understanding.

Grade 1:

- CCSS.ELA-LITERACY.RL.1.1: Ask and answer questions about key details in a text.
- CCSS.ELA-LITERACY.RL.1.3: Describe characters, settings, and major events in a story, using key details.
- CCSS.ELA-LITERACY.RL.1.7: Use illustrations and details in a story to describe its characters, setting, or events.
- CCSS.ELA-LITERACY.RL.1.10: With prompting and support, read prose and poetry of appropriate complexity for grade 1.

Grade 2:

- CCSS.ELA-LITERACY.RL.2.1: Ask and answer such questions as *who*, *what*, *where*, *when*, *why*, and *how* to demonstrate understanding of key details in a text.
- CCSS.ELA-LITERACY.RL.2.7: Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.
- CCSS.ELA-LITERACY.RL.2.10: By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2-3 text complexity band proficiently, with scaffolding as needed at the high end of the range.