



Tutoring Assessment

Subject: Math

Grades: Lower Elementary Assessment

(1) Objects in a box (tutor to bring in box filled with between 20 & thirty objects)

How many objects do you think are in the box?

Next, count the objects to find out how many are in the box.

How many objects are in the box?

Is that number more objects or fewer objects than you predicted?

(2) Bracelets

Rosemary is making bracelets. She has already made 18 bracelets.

She needs to make 22 all together so she can give one to each of her cousins.

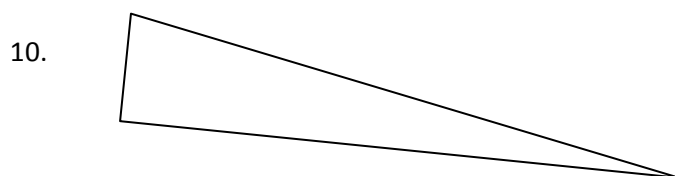
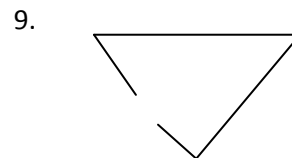
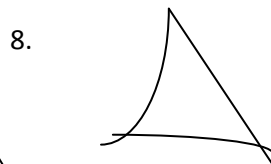
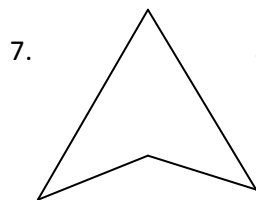
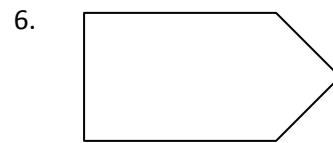
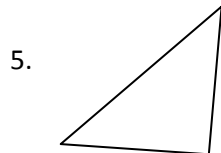
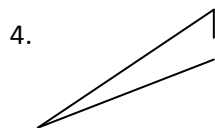
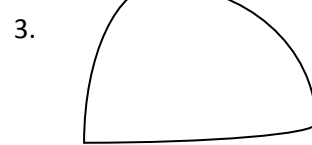
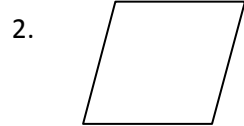
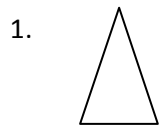
How many more bracelets does she need to make?

Show how you solved this problem. Use pictures, numbers and words.

(3) All about triangles

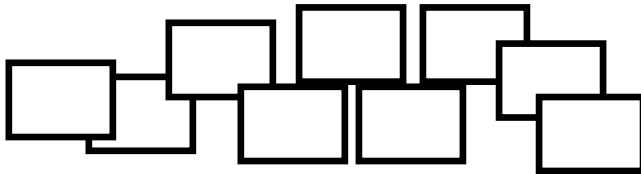
Mark all the triangles on the page.

Tell how you know they are triangles.



(4) Fixing Patterns

I made a pattern by snapping together 12 connecting blocks. Then it fell apart. All I have left of my pattern are three of the blocks I snapped together. They look like this:

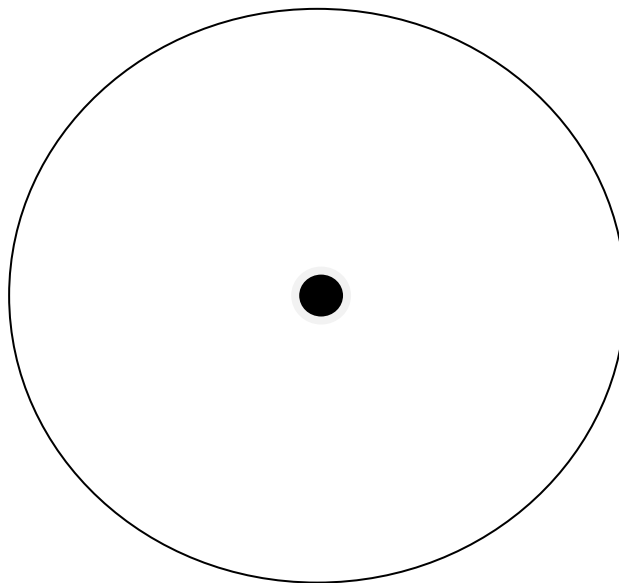


Draw a picture of what my pattern might have looked like.

Are there any other ways the pattern could have looked? Explain or show another possibility.

What color would the 20th block of the pattern be?

(5) Favorite time



What is your favorite time of day?

Draw a clock face to show the time.

Write a sentence or draw a picture to show what you do at that time.

Write a sentence or draw a picture to show what you do *before* that time.

Write a sentence or draw a picture to show what you do *after* that time.

Assessment guide

This assessment is designed to help you to understand your student's comfort level with the math skills and concepts they're expected to master in grades K-2. Each problem in the assessment relates to the K-2 math expectations on the SOW website. We've grouped these expectations into sets of related concepts that show the progression students are expected to make from grade to grade. The guide below will help you relate your student's responses to a specific grade level and give you an idea of where to start with your tutoring activities.

Problem #1: Objects in a Box

This problem will help you to understand your student's comfort level with the following mathematical concepts:

Number Sense

- Kindergarten: Can count and recognize numbers up to 20
Can write numbers 0-9
- 1st Grade: Can count and recognize numbers to 100
Can count and group objects in ones and tens
- 2nd Grade: Can understand multi-digit numbers in terms of place value

Operations

- Kindergarten: Can use objects to solve number problems up to 10
- 1st Grade: Can add and subtract to 99
- 2nd Grade: Can add and subtract to 999

Where to start:

- **Kindergarten:** Your student skips numbers when counting beyond ten or twenty or isn't able to answer the question of how many objects are in the box.
- **1st grade:** Your student accurately counts the objects but is not able to compare this quantity with their original guess.
- **2nd grade:** Your student accurately counts the objects and answers the final question by correctly representing the subtraction problem.
- **3rd grade and up:** Your student successfully and easily completes the entire section and answers all or almost all of the questions correctly. You may want to try the Upper Elementary Assessment with your student.

Problem #2: Bracelets

This problem will help you further understand your student's comfort level with the above concepts.

Where to start:

- **Kindergarten response:** Attempts to draw a picture of the two quantities but isn't able to compare them

- **1st Grade level response:** Correctly draws a picture that shows the two quantities but isn't able to correctly represent or answer the subtraction problem
- **2nd Grade level response:** Demonstrates ability to count on (e.g. starts with 18 and counts on: 19, 20, 21, 22) to solve the problem
- **3rd grade and up:** Your student successfully and easily completes the entire section and answers all or almost all of the questions correctly. You may want to try the Upper Elementary Assessment with your student.

Problem #3: All about triangles

This problem will help you understand your student's comfort level with the following mathematical concepts:

Geometry

Kindergarten: Can draw, sort & classify basic shapes

1st grade: Can recognize geometric shapes and classify according to basic properties

Where to start:

- **Kindergarten:** Your student struggles to sort three-sided and four sided shapes correctly
- **1st grade:** Your student correctly sorts three-sided shapes from the rest, but includes shapes that only have some characteristics of a triangle
- **Advanced response:** Your student recognizes all the triangles and uses formal or informal language to describe why (they have three angles or corners, they have three sides that meet).
- **3rd grade and up:** Your student successfully and easily completes the entire section and answers all or almost all of the questions correctly. You may want to try the Upper Elementary Assessment with your student.

Problem #4: Fixing Patterns

This problem will help you understand your student's comfort level with the following mathematical concepts:

Algebra/Patterns

Kindergarten: Can identify simple pattern sequences

2nd grade: Can count by twos, threes and fives

Where to start:

- **Kindergarten:** Your student isn't able to show how the pattern might repeat
- **2nd grade:** Your student correctly identifies a repeating pattern and counts by threes (or fours) to determine the color of the 20th block.
- **3rd grade and up:** Your student successfully and easily completes the entire section and answers all or almost all of the questions correctly. You may want to try the Upper Elementary Assessment with your student.

Problem #5: Favorite time

This problem will help you understand your student's comfort level with the following mathematical concepts:

Measurement

1st grade- Can use direct comparison to describe the measurement of objects, distance and time (e.g shorter/longer, before/after)

2nd – Can use basic units of measurement to determine distance and time

Where to start:

- **1st grade:** Your student is able to name their favorite time of day, but has trouble sequencing events or connecting those events to the time on the clock.
- **2nd grade:** Your student is able to name their favorite time of day and shows understanding of the concepts before and after. Your student shows a beginning understanding of being able to represent those times on the clock.
- **3rd grade and up:** Your student successfully and easily completes the entire section and answers all or almost all of the questions correctly. You may want to try the Upper Elementary Assessment with your student.