MEASUREMENT TOOLKIT TASK CARDS (GR. K-5)

TASK 1

Use the **measuring tape** to measure the length and width of the table. Calculate the perimeter of the table.

Gr. 3+

TASK 2

Stack 3 of the **feeler gauge** blades together. Add the decimals together and round to the nearest tenth. Use the **digital caliper** to check your answer.

Gr. 5+

TASK 3

Use at lease 2 **feeler gauge** blades to measure the clearance of the spark plug.

Gr. 5+

TASK 4

Use **measuring cups** and **spoons** to compare unit fractions. Order the unit fractions from greatest to least.

Gr. 2+

TASK 5

Use the **tread depth gauge** to find the tread depth of your shoe. Write this number on your answer sheet.

Gr. 1+

TASK 6

Grab 6 pencil crayons from your toolbox. Use the **measuring tape** and **digital caliper** to measure the length of each pencil crayon. Order them from greatest to least by length. Reflect, which tool was more precise and why?

Gr. 4+

TASK 7

Use the **measuring tape** to calculate the perimeter of the door.

Gr. 3+

TASK 8

Use the digital caliper to measure the outer and inner distances of the finger and thumb holes on a pair of scissors. Round your measurements to the nearest tenth of an inch.

Gr. 4+

TASK 9

Use the **digital caliper** to create a square that is exactly 1.19 inches long. Draw the square on your recording sheet.

Gr. 4+

TASK 10

Use the **fractional tape measure** to fill in the missing fractions.
1/8, 1/4, _____, 1/2, _____, 3/4, _____.
Record all of these fractions with a denominator of 8.

Gr. 5+

TASK 11

Use the **measuring tape** to measure the height of your chair.
- Round to the nearest 1/2.
- Now measure the height of your desk.
- Record your answer to the nearest 1/2.
- Subtract the two fractions to get the difference.

Gr. 5+

TASK 12

Using the **fractional measuring tape** locate the improper fraction 21/4 on the tape. What is this as a mixed number?

Gr. 5+

TASK 13

Use the **breaker bar** and **torque wrench** to see how much force can applied. Record the applied force on your answer sheet.

Gr. 1+

TASK 14

Use the **measuring tape** and **digital caliper** to measure the length of each finger. Record each length on your recording sheet. Reflect, which tool was more precise and why?

Gr. 4+

TASK 15

Use the **measuring tape** to measure the height of your chair in cm.

- Record your measurement as a decimal.
- Now measure the height of your desk in cm and record your answer as a decimal.
- What is the difference in these two heights?

Gr. 4+

TASK 16

Use the **measuring tape** to calculate the area of the table.

Gr. 5+

TASK 17

Use the **measuring tape** to measure the height of your chair in cm.
- Round to the nearest whole number.
- Now measure the height of your desk in cm and round to the nearest whole number.
- What is the difference in these two heights?

Gr. 3+

TASK 18

Use a **measuring tape** to see how tall you are (get a friend to help you).
- Round this height to the nearest whole number.
- Now measure the height of the classroom door.
- Round this height to the nearest whole number.
- Order these two heights using the following symbols: $\leq$, $\geq$ or $=$.

Gr. 3+

TASK 19

Use the **measuring tape** with printed fractions to measure the width of the classroom door. What fraction do you see?

Gr. 3+

TASK 20

Using the **measuring cups**, write how many of the following unit fractions are in a whole.

⅛   ¼   ⅓   ½

Gr. 3+

TASK 21

Use the **measuring tape** to measure the length of your desk, table or the toolbox.
- What is the best unit of measure to use millimeters, centimeters or meters?
- Write the length in the best unit.

Gr. 3+

TASK 22

Use the **fractional measuring tape** to write how many inches are in the following feet:

1 foot = how many Inches?
2 feet = how many inches?
4 feet = how many inches?
5 feet = how many inches?

Gr. 3+

TASK 23

Pull the measurement rod from the **tire pressure gauge.** Find the number 20 on the side that says PSI. Using the markings to skip count by 5s to 100.

Gr. 2+

TASK 24

Locate 47 cm on the **measuring tape**. Estimate an object in the room that is around 47cm.
- Write the name of that object on your answer sheet.

Gr. 3+

TASK 25

Which of the following tools will help you skip count by 20?

Digital caliper
Tread depth gauge
Tire pressure gauge
Torque wrench

Write the names of these tools on your answer sheet.

Gr. 2+

TASK 26

Using the **measuring cups**, fill the **¼ cup** full of a substance (like water, rice, pebbles, buttons or hardware).
- How many times can you fill the **½ cup** with the **¼ cup**?
- How many times can you fill the **1 cup** with the **¼ cup**?
- Write this on your answer sheet.

Gr. 3+

TASK 27

Trace the faces of the following tools:
- digital caliper
- tape measure
- measuring cups
- measuring spoons
- sockets
- breaker bar
- feeler gauge blades

Classify these images according to shape, size, vertices, straight and curved lines.

Gr. K+

TASK 28

Organize each tool according to size starting with the smallest or largest. Assign ordinal numbers to each tool according to its position.

Gr. K+

TASK 29

Organize each tool according to weight starting with the lightest or heaviest. Assign ordinal numbers to each tool according to its position.

Gr. K+

TASK 30

Use the **measuring tape** to measure the length of your leg. Write that number on your answer sheet. Starting at that number, skip count by 10's to 200.

Gr. 2+

TASK 31

Select 2-4 tools from the toolkits. Create or examine a repeating pattern made with the tools. Identify the following attributes of the repeating pattern:

- Pattern core
- Elements
- Number of repetitions
  Extend the pattern 1-2 times.

Gr. K+

TASK 32

Use the **measuring tape** to measure the length of your arm. Write that number on your answer sheet. Starting at that number skip count by 2's to the nearest 100.

Gr. 2+

TASK 33

With a partner use the **measuring tape** to measure your height. Write that number on your answer sheet. Now measure the height of your partner and write that number on your answering sheet. Find the difference between your height and your partner's height. Is this an even or an odd number? Explain.

Gr. 2+

TASK 34

Use the **digital caliper** to measure the length of your glue stick and your eraser. Round to the nearest whole number. Add these two numbers together. Is this an odd or even number? Explain.

Gr. 2+

TASK 35

Using the **measuring cups** and **spoons** identify the following unit fractions:

¼

½

Order these fractions from least to greatest. Using the terms greater than and less than, describe the units cup, tsp and tbsp to a partner.

Gr. 2+

TASK 36

Use the **measuring tape** to measure the following heights in centimeters:

The height of a desk
The height of a table
The height of the doorknob
The height of a chair.

On your answering sheet order these heights from shortest to tallest.

Gr. 2+

TASK 37

Use the **tread depth gauge** to find the tread depth of a tire.
- Write these numbers down on your answer sheet.

Gr. 1+

TASK 38

Use the **tire pressure gauge** to see how much pressure is in a tire.
- Record your answer in PSI on your answer sheet.

Gr. 3+

TASK 39

TASK 40

TASK 41

TASK 42

TASK 43

TASK 44

TASK 45

TASK 46

TASK 47

TASK 48