## KUM (N Stay-At-Home Math Scavenger Challenge – LEVEL MEDIUM

See how many of the following you can complete and how many completed lines you can make. I've tried to include basic formulas, but feel free to search online or ask your parents. Fill your answers on the printable Answer Sheet, or write them onto your own numbered paper. Scan or take a clear picture of your completed answers and submit to <a href="mailto:kumonsunnyvale@gmail.com">kumonsunnyvale@gmail.com</a>.

| 1. Measure the      | 2. Using #1, what          | 3. Write down the  | 4. Find exactly \$1        | 5. Use a timer.     |
|---------------------|----------------------------|--------------------|----------------------------|---------------------|
| dimensions of       | is the perimeter of        | time you go to bed | worth of coins.            | See how many        |
| your TV screen.     | your TV screen?            | and wake up the    | You must have at           | jumping jacks you   |
| What is the area    |                            | next day.          | least 1 penny, 1           | can do in 1         |
| of the screen?      | <b>1 1 1 1 1 1 1 1 1 1</b> | Calculate how      | nickel, 1 dime, and        | minute. Calculate   |
|                     |                            | much time you      | 1 quarter. How             | how many you        |
| W AREA =            |                            | slept in hours and | many of each do            | could possible do   |
| LxW                 |                            | minutes.           | you need?                  | in 24 hours and 1   |
| L                   |                            |                    |                            | year.               |
| 6. Time yourself    | 7. Find 2 circular         | 8. Walk the length | *9. Measure the            | 10. Time how long   |
| doubling numbers.   | items. Measure             | and width of your  | length of your             | it takes for you to |
| Start with 1 and    | their diameters (D)        | room. How many     | foot. Use #8 to            | brush your teeth 4  |
| count up by         | and calculate the          | of your "feet" are | calculate the              | times in a row.     |
| doubling (1, 2, 4,  | radii (diameter=           | the dimensions of  | actual <u>area</u> of your | Find the average    |
| 8, 16). What        | 2xradius).                 | your room?         | room in inches.            | time. AVG=          |
| number can you      | (Def                       | 2 2 2              | <b>₩</b> T                 | T1+T2+T3+T4         |
| get to in 1 minute? |                            | <b>3</b> , 3, 1    | J I                        | 4                   |
| 11. Make a paper    | 12. Find 5 regular         | 13. FREE SPACE     | *14. Look up the           | 15. Find 3 balls or |
| airplane. See how   | pencils and                |                    | temperature every          | spherical objects.  |
| far you can throw   | measure them all.          | KUM ( ) N°         | day at the same            | Measure the         |
| it. Measure and     | Find how much              |                    | time for 4 days.           | circumference       |
| write down your     | longer the longest         |                    | What was the               | (C)(distance        |
| furthest 3 throws   | is compared to the         |                    | average                    | around each).       |
| and order them      | shortest.                  |                    | temperature (SEE           |                     |
| from longest to     |                            |                    | #10)?                      | (====               |
| shortest distance.  |                            |                    |                            |                     |
| 16. Find 4          | 17. Use a ruler to         | 18. Use a timer.   | 19. Count how              | **20. Use the       |
| rectangular         | measure and find           | See how many       | many Kumon                 | measurements        |
| objects. Measure    | 2 perfectly square         | times you can      | packets you have           | you found in #15    |
| the lengths (L) and | items. Tell me             | bounce a ball      | left to do. If it          | to find the radius  |
| widths (W) of       | what they are and          | (SAFELY) in 1      | takes 10 min each          | (R) for all 3 if    |
| each. Find their    | the dimensions             | minute. Calculate  | to complete, how           | Circumference=      |
| areas (LxW).        | (length & width).          | how many times     | much time will it          | 2x3.14xRadius.      |
| AREA =              |                            | you could possibly | take you to finish         | (C=2x3.14xR)        |
| W LxW               |                            | bounce it in 24    | them all                   | B                   |
|                     |                            | hours and 1 year.  | (hours/min)?               | (-3-3)              |
| L                   |                            |                    |                            |                     |
| 21. Find 20 coins.  | 22. Write down             | 23. If we have to  | 24. Measure your           | *25. Using #3,      |
| How many of each    | the time you wake          | shelter-in-place   | height in inches.          | calculate what      |
| do you have and     | up and go to bed           | for 3 more full    | Calculate how              | percentage of the   |
| how much money      | in 1 day. Calculate        | weeks after today, | many centimeters           | day you slept if a  |
| total is it?        | how much time              | what date will it  | tall you are (1            | day has 24 hours.   |
|                     | you were awake in          | be ending?         | inch= 2.54                 |                     |
|                     | hours & minutes.           |                    | centimeters).              |                     |

## KUM (N Stay-At-Home Math Scavenger Challenge – LEVEL MEDIUM

Fill your answers on this printable Answer Sheet, or write them onto your own numbered paper. Scan or take a clear picture of your completed answers and submit to <a href="mailto:kumonsunnyvale@gmail.com">kumonsunnyvale@gmail.com</a>. Submissions will get you an entry into our drawing for a gift card to Target or Amazon.

## ANSWER SHEET - include units when needed

| 1              | 2              | 3               | 4                | 5                |
|----------------|----------------|-----------------|------------------|------------------|
|                |                | BED TIME        |                  | # Jumping Jacks: |
| Length:        | TV screen      | :               | Pennies:         | 1 min            |
| Width:         | Perimeter      | WAKE UP TIME    | Nickels:         | Calculate:       |
| Area:          |                | :               | Dimes:           |                  |
|                |                | SLEEP TOTAL     | Quarters:        |                  |
| Include units. |                | hrs min         |                  | ,                |
| 6              | 7              | 8               | 9                | 10               |
| In 1 minute I  | Diameter       | Width           | My foot          | Time 1:          |
| can count by   | Circle 1:      | of my "feet"    | measures         | Time 2:          |
| doubling up to | Circle 2:      | Length          |                  | Time 3:          |
|                | Radius         | of my "feet"    | Calculate:       | Time 4:          |
|                | Circle 1:      |                 | My room area     | Average Time:    |
|                | Circle 2:      |                 |                  |                  |
|                | Include units. | 42 5855 68465   | Include units.   | Include units.   |
| 11             | 12             | 13. FREE SPACE  | 14               | 15               |
| Furthest       | Pencil 1:      | KUM () N°       | Temp 1:          | Circumference    |
| throws         | Pencil 2:      | 1011            | Temp 2:          | Ball 1:          |
| 1:             | Pencil 3:      | <b>▲</b>        | Temp 3:          | Ball 2:          |
| 2:             | Pencil 4:      |                 | Temp 4:          | Ball 3:          |
| 3:             | Pencil 5:      |                 | Average Temp:    |                  |
| Include units. | Difference:    |                 | Include units.   | Include units.   |
| 16             | Include units. | 18              | 19               | 20               |
| 10             | Item           | # Ball Bounces: | # Kumon          | Calculate Radius |
| Length:        | reem           | 1 min           | Packets left     | Ball 1:          |
| Width:         | L:W:           | Calculate:      | 1 dekets left    | Ball 2:          |
| Area:          | Item           | 24 hours        | Time to          | Ball 3:          |
| 7 🔾            | iteiii         |                 | complete         | Dall 3           |
|                |                | 1 year          | hrs min          |                  |
| Include units. | L: W:          | 23              | 24               | 25               |
| Pennies:       | WAKE UP TIME   | Today's date:   |                  | 25               |
| Nickels:       | ·              | / / /           | Height in inches | Percentage of    |
|                | BED TIME       | 3 weeks later:  |                  | Sleep Time       |
| Dimes:         | :              | y weeks later:  | in               | %                |
| Quarters:      | SLEEP TOTAL    | /               | Height in        |                  |
| Total: \$      | hrs min        |                 | centimeters      |                  |
|                |                |                 | cm               |                  |