

Grades K&1 Math Workshop Practice Tasks

After the instructional routine to begin a Math Workshop session, students then most often move into practice tasks. These are sometimes called learning stations or table tasks.

Practice tasks:

- Are all games, routines, and tasks that students have done before and are familiar with so that they can do them independently or in small groups
- Are all focused on the same concept or learning goal such as “counting” or “decomposing numbers” and develop mathematics curricular competencies
- Math Workshop is done once or twice a week, all year long, and focuses on foundational math concepts: number concepts and computational fluency
- The goal is for students to be metacognitive and think about what they need to practice and make those choices for themselves, although the teacher may structure a rotation between tasks or determine set groups at the beginning of the year as Math Workshop expectations are being established
- Include the practice of using mathematical vocabulary and language
- Include the practice of representation and communicating mathematical thinking

Once the routine of practice tasks is established, you can then add a table for small group instruction with the classroom teacher or learning resource teacher.

Small Group Instruction considerations:

- Plan for short (5 minute) interactions with a small group of students (2-4)
- Plan around the learning goal and learning standards that you are focusing on
- Have a small set of materials that you can use efficiently for all groups
- Predetermine your groupings based on regular in-class assessment and students’ level of proficiency or invite small groups of students to join who to learn more about a specific strategy, tool, or material
- Have a clipboard with a class list and math learning standards (these are all available for K-5 on Richnet and are called “Class Profiles”) to document evidence of learning during small group instruction

When you introduce Math Workshop, it will take time to build students’ understanding of how to engage with materials, tools, and each other while doing intentional practice. A learning goal helps bring students together and provides a focus for the closing circle, discussion and consolidation. Students need to understand their responsibility to learn and practice during the practice tasks. One structure to use to support this is using a consistent framework at the end of Math Workshop when you bring the students together as whole group again and have them share:


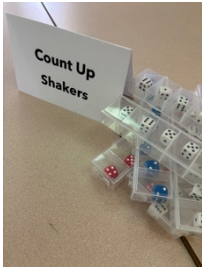

What did you do?



What math were you learning? What did you practice?

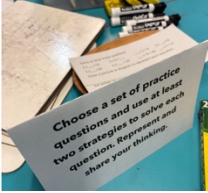
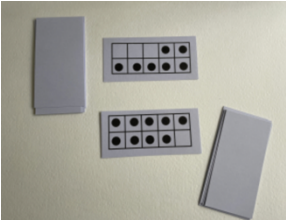
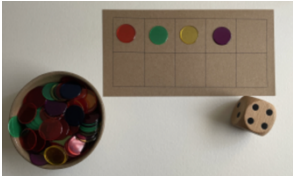
What’s next for your learning? What is your math goal for next time?




You might need to model what this looks like such as:

“I did clothesline. I am learning about ordering numbers. I was practicing putting numbers in order. Next time I want to try using different ways to make numbers.”

Task	Description	Materials and Resources	Math Content Areas
Splat	A task that develops algebraic thinking and solving for an unknown. Students see total number of dots and then some dots are covered by a splat/s with remaining dots visible. Students figure out how many dots are under the splat/s.	<p>After introducing Splat as a whole class routine, mini-splats made out of paper or felt can be used with counters or glass gems for students to create Splat problems for each other. Number cards can be added for students to add to their Splat! game.</p> 	<p>Algebraic thinking</p> <p>Connections between addition and subtraction</p> <p>Composing and decomposing numbers</p>
Count Up Shakers	The students shake the shaker three times and then put it down on the table or counter. They then count up the number of dots/pips in totals. Students may also finding matching numbers (how many threes were rolled in the shaker?)	<p>The Box Cars shakers are like “pill boxes” with seven compartments for dice.</p>  <p>https://boxcarsandoneeyedjacks.com/product/filled-dice-shakers-each/</p>	<p>Number</p> <p>Subitizing</p> <p>Counting</p>
Counting Collections	A pair of students counts a collection of items in multiple way) and records the count using pictures, words and symbols.	<p>https://tedd.org/counting-collections/</p> <p>https://blogs.sd38.bc.ca/sd38mathandscience/2015/11/03/counting-collections/</p> <p>After introducing the routine to the whole class, counting collections can be a follow up practice task during math workshop and a small whiteboard can be added to the table to have students record their counts in different ways.</p>	<p>Number, quantity, skipcounting, place value</p>
Ways to Make	Students compose and decompose a quantity with different materials. Grade 1 students may begin to record equations to represent their representations.	<p>Suggested materials:</p> <ul style="list-style-type: none"> Unifix cubes Cuisenaire rods SumBlox Numicon Shapes Two-sided counters Dotted dice Dominoes Rekenreks <p>Mini Whiteboards and markers for recording using pictures and symbols (equations)</p> 	<p>Number, quantity, skip counting, place value, number patterns</p>

Task	Description	Materials and Resources	Math Content Areas
Estimation Jars	Students estimate the quantity of items in a jar or container. Leave one item or a group of 2 or 5 items out for students to use as a referent.	Vary the shape and size of the container and the shape and size of the items used. Use a mini-whiteboard at the table for students to add their estimates. Include the counting of items and comparing of estimates as part of the closure to Math Workshop.	Estimation Number and quantity
Concept Circle	A concept word (pattern) or a number (7, 18, etc) or equation ($5+2=$) is written in the centre of a circle with spaces around it for students to build and connect representations of that concept.	Students can use materials to represent the concept in each section of the circle. If laminated, students can use dry erase markers to draw or write in each section. Near the end of the Math Workshop time, bring students together to compare two of the representations: How are these the same? How are they different?  Source: Dr. Cathy Marks Krpan	Numbers Composing, decomposing, representing
If the answer is...	In the middle of a piece of chart paper, write a number (5, 15 etc) and ask, if the answer is __, what could the question be?	Students can draw, write, add equations or “story” problems to the chart. Source: Dr. Marian Small	Numbers Quantity Beginning addition and subtraction Problem solving
Clothesline	Students order and compare numbers by placing tent cards along a clothesline or interactive number line.	A mini-clothesline for small group learning can be created using repurposed materials such as chopsticks and could be an ADST project.  https://kristenacosta.com/clotheslines/ Mini clothesline numbers https://blogs.sd38.bc.ca/sd38mathandscience/wp-content/uploads/sites/14/2024/11/K-1-mini-clothesline-numbers.pdf	Numbers Comparing and ordering
Match or Order	Students match different representations of a number or use different materials and representations to put the numbers in order.	Playing cards, index cards with numbers or dot patterns drawn on them, dice, number cards from different games Tiny Polka Dot (box of cards) Smaller, free printable version of Tiny Polka Dot cards can be found here: https://mathforlove.com/games/tiny-polka-dot/get-tiny-polka-dot/	Numbers Representations of quantity Comparing and ordering

Task	Description	Materials and Resources	Math Content Areas
Practice Questions	Students choose a set of practice questions and answer them in a math notebook or on a mini-whiteboard. Students are often asked show more than one strategy or way of making a number.	For Richmond teachers, a year's worth of practice questions for different grade bands are available on Richnet on a tile under each Numeracy Foundations Framework. For K&1 teachers, these are more applicable for your grade 1 students to do independently. These can either be printed out on cardstock and used all year (students choose questions from a basket) or projected on a screen. 	All math content areas
Face-Off	Students each turn over a card and compare. The person with the "greatest" or "least" quantity (players decide) wins the card. Extend by turning over two cards and combine/add them together before comparing.	Can be played with regular playing cards beginning with Ace(1) – 5 and then increasing to Ace-10. You can also use ten frame cards.  https://blogs.sd38.bc.ca/sd38mathandscience/wp-content/uploads/sites/14/2020/05/SD38_Face_Off_Game.pdf https://janicenovkam.typepad.com/files/bcrim_faceoff_game.pdf	Numeral recognition Subitizing Comparing quantities
Garbage	Students play in pairs, creating a ten frame of playing cards and turn over cards to complete a ten frame from 1-10.	Detailed game instructions are available below in printed and video form: https://blogs.sd38.bc.ca/sd38mathandscience/wp-content/uploads/sites/14/2020/05/SD38_Garbage_Game.pdf https://youtu.be/TL61gQ6SBE0	Numbers Comparing and ordering, magnitude, number recognition, ordinal numbers
Make Ten	Using a ten frame and counters, students, roll a dice and take turns rolling until they have filled up their ten frame.	Begin by using a dotted dice (so students can count/subitize) and then students can move to a numeral dice. Players can decide whether they have to roll "exactly" to fill their frame. This game can also be played in reverse, starting with the ten frame filled up and removing counters. Ask students to name "how many more to make ten?" before taking their next turn. An adaptation would be to use a five-frame to begin with and a dotted dice with 1, 2 and 3 on it (can make with a blank wood cube and a black sharpie).  https://janicenovkam.typepad.com/files/bcrim_maketen_game.pdf	Subitizing Counting Ten-ness Composing and decomposing

Task	Description	Materials and Resources	Math Content Areas
Towers and Trains	Students roll two dice and combine the quantity and build a tower or train with that quantity of cubes. Partners compare their trains/towers and figure out the “difference”	Can use wood cubes, Unifix cubes or other types of snap cubes. Regular and 10 or 12 sided dotted and numeral dice   https://janicenovkam.typepad.com/files/bcrim_towers_game.pdf https://janicenovkam.typepad.com/files/bcrim_trains_game.pdf	Subitizing Comparing quantities Counting
Frog Jump	Children roll a die and move their frogs that many jumps along a number path. Partners compare their jumps.	This game uses a number path which supports children to focus on one-to-one correspondence when counting. Use a green cube or gem to represent the “frog”.  https://janicenovkam.typepad.com/files/bcrim_frogjumps_game.pdf	Subitizing Counting Comparing numbers Counting on

Materials to introduce in K&1 Math Workshop:

- Counters (cubes, bingo chips, discs, two-sided counters, etc)
- Regular dotted and numeral six-sided dice
- Playing cards (A-9 or 10, Ace=1)
- Cards with different representations of quantities (numeral, dots, tallies, etc)
- Rekenreks
- Cuisenaire Rods
- Numicon Shapes
- Dominoes
- Sumblox

Tools to introduce in K&1 Math Workshop:

- Five frames
- Ten frames
- Number paths

SD38 K-5 Inclusive Practices in Mathematics: Math Workshop

This video is shared on the Numeracy Playlist on our district’s YouTube channel:

https://youtu.be/W38rzoDhJJQ?si=5YqCiTdMYqgkl_v1