



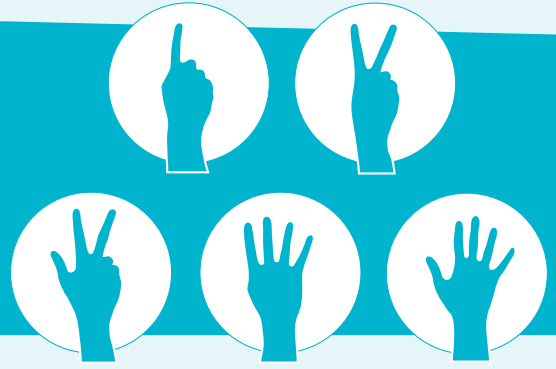
Easy & Effective Math Tips

with Math Expert Diane Stang

Use with students in-class or online!

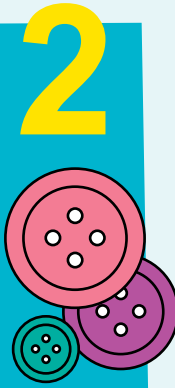
1 Pause and check in with students during math lessons.

Use emojis like thumbs up or down, or try a fingers-based scale of understanding from 1 to 5 so you can check for student comprehension. Do polls to check in with students' social-emotional learning skills and how they are feeling about the learning and themselves.



2 Use lots of visuals as math conversation starters.

Give concrete examples and context that are familiar to students and relevant to their lives. For example, show a picture of a set of buttons and have students estimate how many there are. Or, share a picture of a room and ask students to identify 3D objects and 2D shapes. Find similar shapes in their homes and neighbourhoods.



3 Make literacy connections while teaching math.

Do read alouds with books that have math content. Have students make connections to a situation or problem from a literacy perspective and from a math perspective. This helps students realize that both literacy and math play integral roles in their lives. For the first reading, have students analyse the book from a literacy perspective (e.g., inferring, predicting, visualizing) and then have them focus on the math for the second reading (e.g., problem solving, connecting, representing).



4 Create a sense of community and belonging in your math class.

Social-emotional learning skills cannot be overlooked as students learn online, since they may be working on their own rather than being part of a group. It is important to create a sense of community and belonging in the online setting. Do regular checks with students about how they are feeling. Carry out whole-group activities such as polls and surveys so students can learn more about each other. Engage students in activities that allow them to interact with one another, such as playing games.



5 Teach math through a cross-curricular lens.

Look for ways to create familiar contexts when teaching math, drawing from what has been studied in other subjects such as literacy, social studies, or science. Drawing from other subjects can help build student confidence by tapping into their background knowledge as a jumping point for teaching math.



6 Use breakout rooms to connect students or assess comprehension.

Breakout rooms can be used to play math games with a partner or small group, or carry out peer assessment. It is important to create success criteria with the class first so they know what to discuss and what the expectations of the task are. This frees up the teacher to enter a separate breakout room for those who need extra support and the opportunity to clear up any math misconceptions.



7 Apply literacy visualization skills to math.

In literacy, we have students visualize a scene in a book or a character from a given description. Apply this concept to math and ask students to visualize a quantity or shape or structure that is described orally to them.



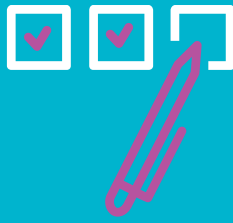
Quick & Easy Instructional Strategies

- Students can use concrete materials from around the house for your lessons like: beads, toothpicks, pennies, dried beans, and paper clips
- Assign tasks that involve other family members (e.g., measure the feet of all family members and compare their lengths)
- Incorporate number or 'math talks' into many of your lessons and encourage all students to participate, listen to each other, and add onto each other's ideas.
- Use visuals as often as possible to reinforce math concepts
- Instill a growth mindset in students so they feel that they can learn math with effort and perseverance. Celebrate mistakes and discuss them in the light of being learning opportunities.
- Get students excited about math by showing some wondrous real-life examples. For example, show some slides of math in nature, such as how pine cones and sunflowers grow in a pattern. Set up a Math wonder wall that students can add to throughout the year.



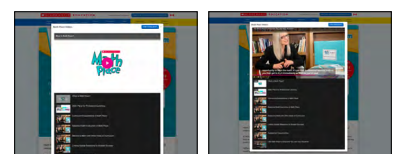
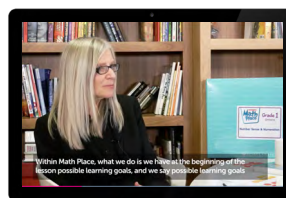
8 Break down math instruction into manageable chunks.

Keep students engaged through three-part lessons, by varying the type of task, the learning materials, and how students are grouped. For example: a *Minds On* can be a 'math talk' or whole-group discussion around a "Which One Doesn't Belong" visual. The *Working On It* can follow with a related problem that students solve on their own or with a partner using concrete or virtual manipulatives. The *Consolidation* can involve small groups explaining their solutions to the entire class or to another group. The BIG IDEAS of the lesson can be made explicit by co-creating success criteria or an anchor chart. This can be followed by a culminating activity that allows for individual practice.



Diane Stang is Scholastic's National Math Consultant and Lead Author of Math Place. She's been an educator for over 40 years. Her tried and true classroom-tested lessons coupled with her balanced math approach empowers teachers to teach math in authentic, meaningful ways and meet the needs of all students.

Learn more about Math Place and watch Diane Stang videos online:



<http://schol.ca/x/MathPlaceVideos>

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