







Engaging Students with Notice and Wonder Plushies

In the classroom:

- Use the Notice and Wonder plushies as prompts for students to share their thoughts or observations. For example, you can toss the "Notice" plushie to a student and ask them to share something they notice about a math problem. Then, toss the "Wonder" plushie to a student and ask them to wonder about what they just noticed. (Start by holding the plushie and posing a question about a math concept you're learning. Toss the plushie to a student who shares their wonder. The student can then toss it to another student who builds upon the previous wonder with their own question. Continue the chain until multiple students have participated.)
- Hide the Notice and Wonder plushies around the classroom or school with math problems or challenges attached to them. Students have to find the plushies, notice and wonder about the problem, and then solve it.
- Assign classroom jobs related to the plushies, such as "Notice Keeper" or "Wonder Investigator." These students
 can help facilitate discussions and encourage their peers to share their observations. (Here are some other fun
 names for your plushies: Notice Nurturer, Notice Navigator, Notice Champion; Wonder Seeker, Wonder
 Discoverer, Wonder Quest Leader)
- Read a children's book with (or without!) a math theme and have students hold up the Notice or Wonder plushie at points in the story where something mathematical happens.
- Create a bulletin board labeled "Notice and Wonder." Students can pin sticky notes with their notices and wonders during or after a lesson. Use the plushies to highlight and discuss these contributions in class.
- Give out the Notice and Wonder plushies as awards to students who make particularly insightful observations or ask thought-provoking questions. These students can keep the plushies at their desks for the day.
- Before starting a new lesson or problem, pass the Wonder plushie for students to make predictions about what they will learn or what the solution might be. Follow up with the Notice plushie to confirm or revise their predictions during the lesson.
- Present two scenarios ("Would you rather solve a system of equations using substitution or elimination?") Hold up the Notice plushie and ask students why they would choose each option, highlighting the mathematical concepts involved. Then, switch to the Wonder plushie and ask them what they wonder about the consequences of each choice (time, efficiency, etc.)
- Set up two stations at the classroom exit, each with a sign and a basket. One station has the "Notice" sign and the other has the "Wonder" sign. Students write their response to a question related to the day's learning on a piece of paper and toss it into the corresponding basket as they leave.









- Divide the class into small groups. Assign one student in each group the role of "Notice" and another the role of "Wonder" for a specific period. These students initiate discussions within their groups, prompting observations and questions about a math activity or problem. The roles can rotate throughout the lesson to keep everyone engaged.
- Hold a Socratic Seminar discussion on a mathematical concept. Before the discussion, assign each student either the "Notice" or "Wonder" role. During the discussion, students can raise their hand with the plushie to initiate a comment or question that aligns with their assigned role.

In the real-world:

- Take pictures of the Notice and Wonder plushies interacting with real-world objects that showcase mathematical concepts. This could be the Notice plushie standing next to a ruler measuring a tree or the Wonder plushie looking puzzled at a spiral staircase.
- Capture pictures of the plushies amidst natural patterns—the Notice plushie pointing at the hexagonal cells in a honeycomb or the Wonder plushie gazing at the symmetrical arrangement of leaves on a plant.
- Take photos of the Notice and Wonder plushies interacting with architectural elements that demonstrate geometric shapes. The Notice plushie could be peeking through a circular window or the Wonder plushie might be contemplating the triangular roof of a house.
- Take photos of the Notice and Wonder plushies next to objects that are really big or really small. Have students use the plushie to determine the approximate size of the real-world object, determining the scale factor.
- Before going on a field trip or nature walk, give students a list of prompts or questions related to finding math in the real world. They can use their phones or a camera to take pictures that demonstrate these concepts, incorporating the Notice and Wonder plushies for added fun.
- Take pictures of the Notice and Wonder plushies in different real-world scenarios that involve math problems.
 For example, the Notice plushie could be standing next to a pile of building blocks with a specific number, prompting students to figure out how many additional blocks are needed to complete a structure. After your real-world photo adventure, have students present their pictures in class, explaining the math concept they noticed or the question they wondered about in each photo.