Notice and Wonder

What Happens	Markers of Excellence	Potential Action Steps
• Display the image. • Give students 1 minute of quiet think time and ask them to signal when they have 1 noticing and 1 wondering. • Give students 1 minute to share what they noticed or wondered with a partner. • Individual students share noticings and wonderings. • Teacher charts student responses on a t-chart.	Teacher Execution • Teacher has key noticings/wonderings to listen for during the turn and talk (while also listening carefully for other ideas to leverage) • Teacher strategically sequences noticings/wonderings (ex: the teacher may ask previously selected students with helpful and accessible noticings to share first) • Teacher effectively captures student reasoning on Notice and Wonder chart • Teacher uses Notice & Wonder as an opportunity to promote equity of voice by privately inviting quieter or less confident students to share their turn and talk ideas whole group if they're ready Student Discourse & Culture • Turn and talks are efficient	*Begin with mastering the 'What Happens'- any step missed should be the action step.* Here are some other potential action steps: • Script/print key noticings/wonderings to listen for- write the students' names by the key points you hear as you circulate • If you have your key points and notes from circulating, invite those with most accessible noticings first • Use student language when writing the Notice & Wonder record

	• Partners give their full attention to each other when speaking • Students use non-verbal signals to communicate agreement/ disagreement when other students share	

Number Talks

What Happens	Markers of Excellence	Potential Action Steps
• Display one problem at a time. • Establish and uphold Number Talks as a mental math activity. • Invite students to think about more than one way to find an answer. • Give students quiet think time per problem. • Ask students to give a private signal when they have an answer and a strategy. • Do a whisper shout or surface all answers before having	Teacher Execution • Teacher scripting of student reasoning is clear and organized • Teacher attributes strategies to students by writing their names by their reasoning • Mistakes/incorrect solution methods are valued • If there are different answers there is eventually clarity on which answer is correct and why	*Begin with mastering the 'What Happens'- any step missed should be the action step.* Here are some other potential action steps: • Script potential solution methods • Script connecting questions based on the solution methods anticipated and the connection to the lesson

students explain
• Call on one student at a time. While the student explains, teacher scripts the student's reasoning
• Ask whole class follow up questions:
  ○ Ex: Did anyone solve the problem differently?
  ○ Ex: Do you agree or disagree? Why?
  ○ Ex: Did anyone think of it visually?
• Ask a connecting question turn and talk:
  ○ Ex: How are A and B's strategies related?
	Student Discourse & Culture
	• Students support peer risk taking (ex: positive peer tone if a student shares an incorrect solution)
	• Turn and talks are efficient
	• Partners give their full attention to each other when speaking
	• Students use non-verbal signals to communicate agreement/ disagreement when other students share	

Which One Doesn't Belong?

What Happens	Markers of Excellence	Potential Action Steps
• Display the set of images for all to see. • Give students quiet think time to think about which one doesn't belong (or why each one doesn't!) • Ask them to give a signal when they have noticed one that does not belong and can explain why. • Give students 2 minutes to share which one doesn't belong with a partner. Challenge partners to find at least one reason each image doesn't belong. • Ask the group why each of the images doesn't belong and annotate image with any helpful words or information surfaced by the students	Teacher Execution • Teacher has key ideas to listen for during the turn and talk (while also listening carefully for other ideas to leverage) • Teacher uses WODB as an opportunity to promote equity of voice by privately inviting quieter or less confident students to share their turn and talk ideas whole group if they're ready • Teacher attends to precision in recording (*ex: a student says a triangle is isosceles, but there is not enough information. Teacher asks student if s/he could write, 'appears to be isosceles'*) Student Discourse & Culture • Students support peer risk taking • Turn and talks are efficient	*Begin with mastering the 'What Happens'- any step missed should be the action step.* Here are some other potential action steps: • Script/print key ideas to listen for- write the students' names by the key points you hear as you circulate • If you have your key points and notes from circulating, cue (or ask) students that you will be calling on them to share their ideas

	• Partners give their full attention to each other when speaking • Students use non-verbal signals to communicate agreement/ disagreement when other students share	