

Setting up Number Talks – First 20 Days

Welcome to Number Talks! This is a student-focused plan to help you get Number Talks up and running in your classroom. A few notes:

- The plan is laid out for 20 days. If you feel your students are ready to move faster than what is laid out here, feel free to shorten the plan to meet your students' needs.
- Remember that you are an integral part of Number Talks! Carefully observe the teachers in the videos, and practice the 5 talk moves throughout the next 20 days (and beyond).

Day 1: Establish your space for Number Talks.

Your space should allow you to maintain close proximity to your students. The physical act of moving to a designated space serves as a reminder that the class is transitioning as learners into a unique time of the day. This space also allows you to observe and informally assess your students.

- Before moving to your designated space, tell your class that you will be doing something different in math called Number Talks. Number Talks are so special that they need a special space in your classroom. The first step to a successful Number Talk is calmly moving to the correct location.
- Review with students your classroom expectations for moving to / from different areas (walking feet, quiet voices, etc).
- Have 1 or 2 students model the incorrect way to move to your Number Talks space. The rest of the class observes, and then votes on how the 2 students did, pointing out the specific expectations that were done incorrectly.
- Have 1 or 2 students model the correct way to move to your Number Talks space. The rest of the class observes, and then votes on how the 2 students did, pointing out the specific expectations that were done correctly.
- The whole class moves to your Number Talks space. Each student votes on how he/ she did. Ask a couple of students to point out the specific expectations that he/she did correctly.
- Have the whole class move back to their seats, and then ask a couple of students to point out the specific expectations that he/she did correctly.

Day 2: What is a Number Talk?

A Number Talk is a classroom conversation or discussion around a purposefully crafted computation problem. Number Talks are where the class comes together to share their mathematical thinking and strategies, and make sense of numerical relationships. Your students will have different words for these ideas, but try to guide your discussion towards this.

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Each student votes on how he/ she did. Ask a couple of students to point out the specific expectations that he/she did correctly.
- Tell students that today, we will be learning and discussing what a Number Talk is. We will learn about Number Talks by watching a video. Tell students to think about what they think a Number Talk is based on the video.
- Watch a classroom clip for your grade from the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Write the question: What are Number Talks? on chart paper. Gather and record student responses. Leave chart paper hanging near your Number Talks space.

Day 3: Establish expectations

It is important that your expectations are worded in the positive manner – the “do” instead of the “don’t”. This makes your expectations clear for students, and does not give them any wiggle room. See chart below for examples.

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Each student votes on how he/ she did. Ask a couple of students to point out the specific expectations that he/she did correctly.
- Review together what Number Talks are.
- Tell students that today you will be establishing expectations for your Number Talks time.
- Watch a classroom clip. Before watching the clip, tell students to watch very carefully for what the students are doing (what their behavior is), and what the teacher is doing. You can use the same clip from yesterday, or a different one. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Create a T-chart of Number Talk expectations. Some key ideas to guide students to include in your chart:

Students	Teacher
Talk about your math thinking	Record student thinking using numbers and symbols
Make a thoughtful contribution; clearly explain your ideas	Ask questions
Ask questions	Listen for understanding
Discuss ideas, not the person	Clarify student thinking
Speak loudly enough for others to hear	Create meaningful problems
Listen for understanding	
Treat others kindly	
Disagree respectfully	

- Leave chart hanging near your Number Talks space

Day 4: Review and practice expectations

Today you will add in specific behaviors for listening for understanding.

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Each student votes on how he/ she did. Ask a couple of students to point out the specific expectations that he/she did correctly.
- Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Discuss how to listen for understanding: with your eyes (looking at person who is talking), your ears, your hands (they are still), your mouth (it is quiet), and your brain (you are thinking about what the person is saying).

- Watch a classroom clip. Before watching the clip, tell students to watch very carefully for how the students are showing that they are listening for understanding. You can use the same clip from yesterday, or a different one. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Discuss the examples students saw in the video.

Day 5: Review and practice expectations

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Each student votes on how he/ she did. Ask a couple of students to point out the specific expectations that he/she did correctly.
- Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Review how to listen for understanding: with your eyes (looking at person who is talking), your ears, your hands (they are still), your mouth (it is quiet), and your brain (you are thinking about what the person is saying). Add to the chart.
- Watch a classroom clip. Before watching the clip, tell students to watch very carefully for how the students are following expectations and listening for understanding. You can use the same clip from yesterday, or a different one. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Discuss the examples students saw in the video.

Day 6: Introduce student talk moves

When students know that they need to respond to each other, they listen more intently and gradually come to treat one another as partners in mathematical thinking and reasoning.

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Hand out, and [refer to poster of](#), student talk moves. These are the same as / parallel Accountable Talk practices used in reading workshop. Read through the poster / cards
- Watch a classroom clip. Before watching the clip, tell students to listen for understanding and think about what the speaker is saying. Choose a point in the video to pause. Have students point to what response they would use. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Discuss the sentences / responses students would say to the speaker.

Day 7: Practice student talk moves

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.

- Hand out, and refer to poster of, student talk moves. Read through the poster / cards
- Watch a classroom clip. Before watching the clip, tell students to listen for understanding and think about what the speaker is saying. Choose a point in the video to pause. Have students point to what response they would use. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Discuss the sentences / responses students would say to the speaker.

Day 8: Practice student talk moves

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Hand out, and refer to poster of, student talk moves. Read through the poster / cards
- Watch a classroom clip. Before watching the clip, tell students to listen for understanding and think about what the speaker is saying. Choose a point in the video to pause. Have students point to what response they would use. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Discuss the sentences / responses students would say to the speaker.

Day 9: Practice student talk moves

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Hand out, and refer to poster of, student talk moves. Read through the poster / cards
- Watch a classroom clip. Before watching the clip, tell students to listen for understanding and think about what the speaker is saying. Choose a point in the video to pause. Have students point to what response they would use. Choose a few students to say his / her response. Then have students share in partners. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>

Day 10: Practice student talk moves

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Hand out, and refer to poster of, student talk moves. Read through the poster / cards
- Watch a classroom clip. Before watching the clip, tell students to listen for understanding and think about what the speaker is saying. Choose a point in the video to pause. Have students point to what response they would use. Choose a few students to say his / her response. Then have students share in partners. Sources for clips include the Number Talks

DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>

Day 11: Introduce student mathematical thinking talk

It is imperative that students learn to communicate their thinking clearly and precisely. When students talk about mathematical concepts and procedures, they gain a greater understanding not only of the mathematics, but also of their own thought process and understanding.

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Watch a classroom clip. Before watching the clip, tell students to listen for how students start their sentences, and what math words he / she uses. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Pause throughout the video to allow your students to generate ideas of sentence frames and mathematical terms. Record student ideas on chart paper
- Hang chart paper near your Number Talks space for student reference. You will add to this chart throughout the year.

Day 12: Practice student mathematical thinking talk

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Review sentence starter poster that you created yesterday.
- Watch a classroom clip. Before watching the clip, tell students to listen for how students start their sentences, and what math words he / she uses. It would be a good idea to use a different clip than the one you showed yesterday. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Pause throughout the video to allow your students to generate ideas of sentence frames and mathematical terms. Add student ideas to the chart from yesterday.
- Keep chart paper near your Number Talks space for student reference.

Day 13: Practice student mathematical thinking talk

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Review sentence starter poster that you created yesterday.
- Watch a classroom clip. Before watching the clip, tell students to listen to the problem the teacher presents. They are going to respond with one of the sentence starters from your poster. Students do **NOT** need to complete the sentence, or have a mathematical answer.

This is practice for the language students will need to use during Number Talks. Sources for clips include the Number Talks DVD, or from here:

<http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>

- Pause throughout the video and have students respond with an appropriate sentence starter. Students can respond to the group as a whole, as well as to a partner or triad.

Day 14: Practice student mathematical thinking talk

Today you will begin responding to your students using one of the [5 talk moves](#). Your responses keep the conversation flowing, clarify student responses, and support mathematical thinking and learning. You are an important part of Number Talks!

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Review sentence starter poster that you created yesterday.
- Watch a classroom clip. Before watching the clip, tell students to listen to the problem the teacher presents. They are going to respond with one of the sentence starters from your poster. This time students *should* attempt to complete the sentence and have an appropriate answer. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Pause throughout the video and have students respond with an appropriate sentence starter. Students can respond to the group as a whole, as well as to a partner or triad.
- Choose one or two student responses that **you** will respond to. Use one of the 5 talk moves. See how far your conversation takes you!

Day 15: Practice student mathematical thinking talk

- Review where your Number Talk space is.
- Review classroom expectations for moving to / from your Number Talk space.
- Have the whole class move to your Number Talks space. Review together what Number Talks are.
- Review your Number Talks expectations poster.
- Review sentence starter poster that you created yesterday.
- Watch a classroom clip. Before watching the clip, tell students to listen to the problem the teacher presents. They are going to respond with one of the sentence starters from your poster. They are going to respond with one of the sentence starters from your poster. This time students *should* attempt to complete the sentence and have an appropriate answer. Sources for clips include the Number Talks DVD, or from here: <http://www.insidemathematics.org/classroom-videos/number-talks> or there are some clips on YouTube like this one: <https://www.youtube.com/watch?v=W3Ni3bMs2qw>
- Pause throughout the video and have students respond with an appropriate sentence starter. Students can respond to the group as a whole, as well as to a partner or triad.
- Choose one or two student responses that **you** will respond to. Use one of the 5 talk moves. See how far your conversation takes you!

Days 16-20: Begin Number Talks

- Move to your Number Talks space
- Review expectations

- Watch video clip as a reminder – point out student behavior, sentences and responses
- Conduct a number talk – keep it 5 minutes or less the first day, and then add on a minute (as conversation and behavior allows) each subsequent day. Stop your Number Talk when a student is off-task or if conversation diminishes.
- Review your expectations for Number Talks. Each student votes on how he/ she did (thumbs up / down) for each expectation. This allows students to know what they need to practice during tomorrow's Number Talk.

References:

Classroom Discussions: Using math talk to help students learn. Chapin, OConnor, Anderson.

Number Talks by Sherry Perish

The Daily 5 by Boushey and Moser