

SUCCESS WITH NUMBER TALKS

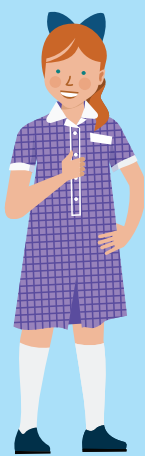
TOP 5 TIPS FOR TEACHERS

A Number Talk is an opportunity for students to communicate mathematically, to learn from each other and to gain insight into an array of strategies used to solve problems.

TALK LESS, HEAR MORE

3.

This is not the time for teacher talk, handling misconception or errors. Instead allow students to provide feedback by challenging and supporting each other's thinking.



Should misconceptions or errors remain, deal with this later after the conclusion of the Number Talk or in a follow up lesson. Record student's thinking on a whiteboard to show various strategies used.

TEACHER ROLE

1.

Teachers should pose a maths problem of interest. Support the conversation, but not drive it, give students thinking time to work on the problem and provide powerful prompts to provoke thinking.

- How does this make sense to you?
- Who saw this another way?
- Can someone explain what student x said?
- How else could we solve this?

STUDENT ROLE

2.

The student's role is to think and provide a response. After the teacher poses the problem students should think about solutions before engaging in discussion. They could be thinking:

- Which strategies can be used to work on the problem.
- How this problem makes sense
- Ideas to add to other student's strategies.
- Why they disagree or agree with a solution, strategy or idea.

CONVINCE ME

4.

Try using this language when embarking on a Number Talk:

- convince yourself,
- convince a friend and
- convince a sceptic
(Burton, Mason & Stacey, 2010).

This language can also be used to guide the steps of a Number Talk by allowing students to gather their thoughts, discuss them with somebody who has similar mathematical ideas (friend) before convincing some who thinks differently (sceptic). Using these terms assists teachers and students to focus on proof and understanding rather than on people. It also invites students to change their thinking.

PLANNING

5.

When planning a number talk the problem selected is important:

1. Select a problem that will encourage different strategies for solving the problem and anticipate the types of strategies students may use.
2. Decide how will you record each of these strategies (and who will record).
3. Plan the questions you will ask to fully understand and represent a student's thinking and/or strategies.
4. Reflect on the Number Talk idea, what thinking you want students to develop, and what problem might you do next and why. *(Humphreys and Parker, 2015)*