Mathletics

Confidence Boosting Activities for Mathematics

For ages 5-12

3P Learning

Confidence Boosting Activities for Mathematics

As teachers, we love seeing our students enjoy learning and grow in confidence. This Confidence Boosting Activities for Mathematics Pack is designed to help you establish a warm and nurturing mathematics environment in your classroom. The activities will help you and your students reflect on learning, celebrate success, build confidence, and most importantly find enjoyment in mathematics.

Activities included in this pack:

Activity 1 – Mathematics Journal

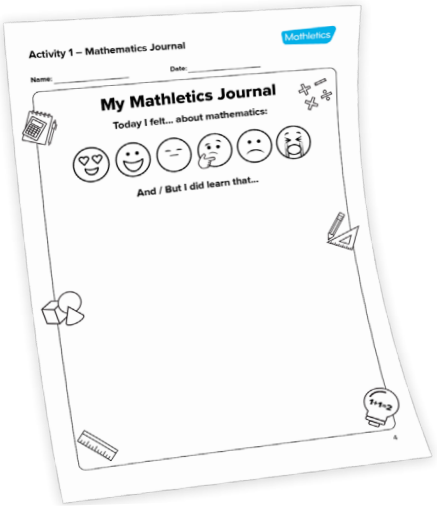
Mathematics journaling is the perfect activity for the end of a lesson or as homework. This activity helps students reflect on their learning and the progress they have made.

How to use this resource:

1. Provide each student with their own journal worksheet.
2. First, students circle how they feel about mathematics on that day. Then they can share what they have learnt about mathematics in any format they like, e.g., short answers, dot points or drawings.

TIP: Have students do this multiple times throughout the course of a topic, week, term or even year. Then have them compare all their sheets over time and see how much progress they have made!

Find the activity sheet on page 4.



Activity 2 – Affirmation Cards

These affirmation cards are designed to help students feel proud of their progress and boost self-confidence. The cards are specifically worded in a way to foster a growth mindset and encourage perseverance.

This resource can be used in several ways:

1. Teachers can present a specific affirmation card to each student based on their achievements for the day, week, or month.
2. You can ask students to select an affirmation card for themselves based on their achievements for the day, week, or month.
3. If you have been running group activities, ask a student to select an affirmation card to give to another student.

TIP: In each of the above instances, we encourage the teacher and students to explain why they have selected the affirmation card for their classmate or themselves. This will help students to take pride in their achievements in mathematics.

Find the activity sheets on page 5 and 6.

Confidence Boosting Activities for Mathematics

Activity 3 - Mathematics Talk – Conversation Cards

These Mathematics Talk cards are designed to stimulate, scaffold and support students in talking about mathematics and build confidence through collaborative work. They are also designed to help students extend their thinking, share strategies, and discover that there are often multiple ways to find an answer.

The aim of these conversation cards is for students to experience assisting each other in student-led explorations. It will take a while for students to feel comfortable voicing their answers, opinions and articulating their thinking. After all, we know this is scary for many!

Use these cards to help cultivate a positive learning environment where different opinions and discussions are valued. Be patient and keep in mind that your students will require a lot of modelling and practise before they may be able to use the cards independently to create the kind of lively and productive conversations, you're excited to hear.

How to use these cards:

This pack contains both partner talk cards and single prompt or sentence starter cards.

Single Cards

Single cards contain both questions and sentence starters. They are a great way of introducing and modelling a maths conversation for your class.

1. Divide the cards into a questions group and an answer prompts group.
2. Hand out the question cards to students.

   Note: Explain that your students will be helping you to think about your answers and that you will be using some 'answer' cards to help you as well.
3. Have students use the cards to ask you questions and model using the answer cards to start your sentence.
4. Then swap roles or give students some answer cards so they can practice both roles as well.

Teaching tips:

- Stick up cards on a board or around the classroom and encourage students to use them if they get stuck.
- Laminate cards and have them handy in group areas or on desks to also use as prompts.
- Run a class challenge! Every time you hear a student using a question or sentence starter prompt, they can earn a point. Keep a leaderboard displayed in the classroom. Let your students know that you'll be eavesdropping on their chats to award points! You can also make certain cards worth more points and award prizes!

Partner Cards

Partner talk cards are designed to help facilitate pair discussions. To the left of the card is a question that a student can ask. To the right is a sentence starter to help another student answer the question.

Split your class into pairs at the end of the lesson and have your pairs use the cards to kick off a discussion.

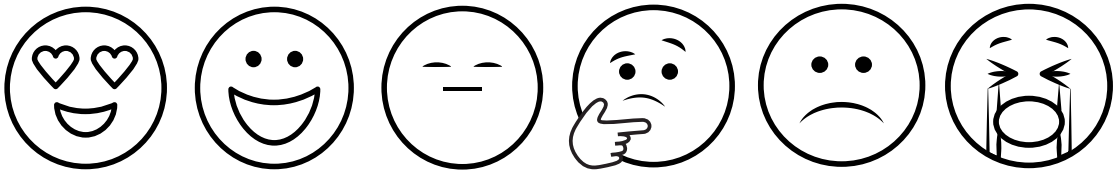
Find the activity sheets on pages 7-11.

Activity 1 – Mathematics Journal

Name: _____ Date: _____

My Mathletics Journal

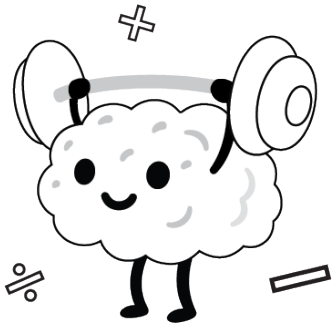
Today I felt... about mathematics:



And / But I did learn that...

Activity 2 – Affirmation Cards

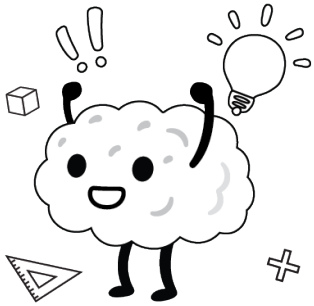
I am building my mathletics muscle



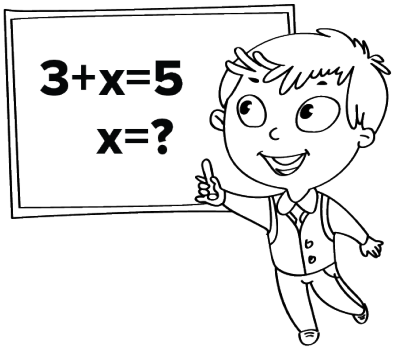
I can stay calm and keep working on problems even when they are hard

I can solve problems without giving up

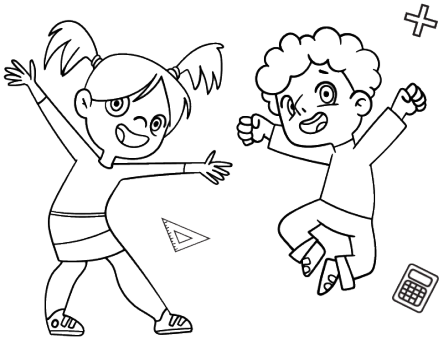
Working on hard problems makes my brain stronger



I can show my work in heaps of different ways



Mathematics is challenging but I won't give up



I make mistakes but I am learning

I am a creative thinker and can try different strategies to solve problems

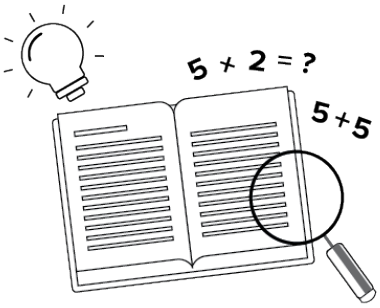
Activity 2 – Affirmation Cards

I'm learning more mathematics everyday

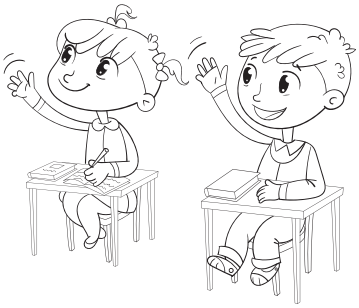
I can tell you how I got my answer

I am feeling better about mathematics each day

I am learning new strategies to solve problems all the time



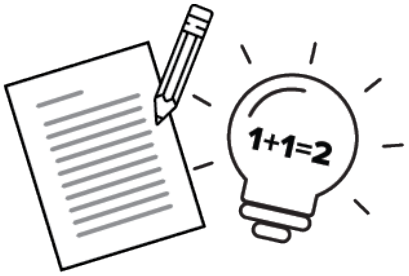
I feel more confident sharing my answers with my class



Helping my friends solve problems makes me happy

I keep trying even if I don't get the question correct at first

I feel brave when I try to solve harder mathematics problems



Activity 3 – Mathematics Talk - Conversation Cards

Single Cards

I'm not sure I understand yet. Can you say more about...

Could you please explain it another way?

So, what I heard you say was...

What does your answer mean?

_____'s way makes sense to me because...

I like/don't like that strategy because...

I know that this strategy works because...

My strategy is little bit different. I_____

Something that I've noticed is...

I'm not sure of my answer. Could you show me how you worked yours out?

Activity 3 – Mathematics Talk - Conversation Cards

Single Cards

I found that the pattern is...

How do we know that our answer is right?

I got stuck at...

Could there be more than one right answer?

I'm wondering if...

I'd like to add to what _____ just shared.

How did you plan to solve your answer?

I know that I was on the right track because...

Activity 3 – Mathematics Talk - Conversation Cards

Single Cards

I got confused when...

Another way we could do it is...

I think the key to solving these types of problems is...

I planned to solve the problem by....
But then....

What do you think the best way to solve this is?

Did we start solving it the same way?

That's how I got there too!
But I think we could also try...

I think that the most important thing to do is...

Activity 3 – Mathematics Talk - Conversation Cards

Partner Cards

What steps did you take to get to your answer?

The first thing I did to work it out was...

Then I...

I think I might have made a mistake in my working out. Could you help me find it?

Sure. Let's compare our working out. Your answer might be different, but we can learn how to work it out together.

I'm not sure of my answer. Could you show me how you worked yours out?

Sure. The first thing I did was...

I'm not sure where to start...

That's okay. The first thing I did was create a plan for solving by...

Activity 3 – Mathematics Talk - Conversation Cards

Partner Cards

What strategy did you use to solve it?

I used the strategy where you... But I think we could also try...

Do you think there is another way to solve the problem?

We could try...

Do you think there might be a faster/ or easier way to solve it?

Maybe it would be easier or faster if we...

How did you know your answer is correct?

I checked my answer by...

Why did you pick that strategy?

I picked this strategy because...

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