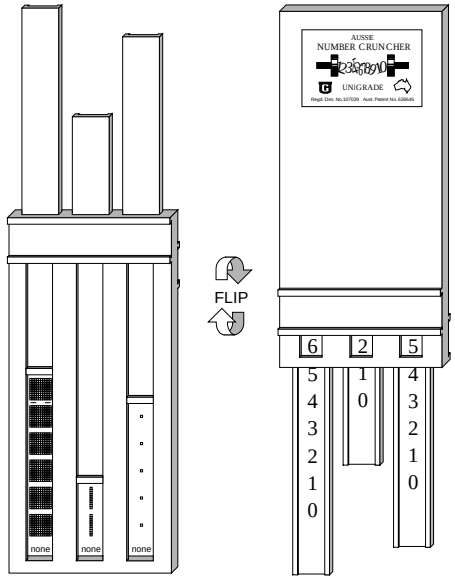
Place Value - Contracting Numbers

Now Students will have a visual aid in placing the digits in the correct columns.

‘Contract 20+600+5 and show the number on your Number Cruncher.’

Initially students use the M.A.B. side and then flip to show the number on the back. This gives students visual help in understanding place value.

When students become proficient they can directly use the digits on the back of their Number Cruncher.



Activity
Write a list of ten numbers in mixed expanded form on the chalkboard e.g. 2+300+40, 800+3+70, ... or 4+50, 60+8, ...
Students show the number in M.A.B. on the front of their Number Cruncher then flip to the digit side and write the number shown.
After all the numbers have been contracted and written down , students rewrite the list of numbers in order, smallest to biggest.
Once students are proficient they can show the contracted number directly on the digit side of their Number Cruncher.

Game
Students play in groups from two to four in size. Each student has a Number Cruncher and each group has three dice of different colours (Use two dice for two digit numbers). Ten–sided dice with digits 0 to 9 are best. The group determines which dice represent the hundreds, tens and ones. A player throws the dice and the first student to show the correct contracted number on the digit side of their Number Cruncher wins a point. The first student to 5 points wins the round. If time permits a number of rounds may be played.

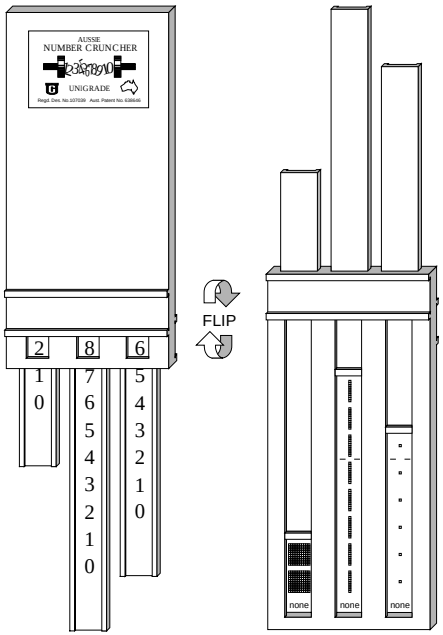
Place Value - Expanding Numbers

Your students will have a visual clue to writing the expanded form of a number.

‘Show 286 on your Number Cruncher and then write it in expanded form.’

Students show 286 on the digit side of their Number Cruncher and then flip to the M.A.B. side. They then write the number in expanded form e.g. 200+80+6.

When students become proficient they can write the expanded form directly from the digit side of their Number Cruncher.



Activity
Students are selected to throw three dice (or two dice for two digit numbers). They call out whatever number they make up using the three digits thrown. All students show the number on the digit side of their Number Cruncher. They then flip to the M.A.B. side and write the expanded form of the number. The teacher corrects after each throw.

Game
Students play in groups from two to four in size. Each student has a Number Cruncher and each group has three dice of different colours (Use two dice for two digit numbers). Ten–sided dice with digits 0 to 9 are best. The group determines which dice represent the hundreds, tens and ones. Students take turns to throw the three dice. The first student to show the correct number on the M.A.B. side of their Number Cruncher and to write the expanded form on paper scores a point. The first player to reach five points wins the round. If time permits a number of rounds may be played.