

Back to Back Numbers

Overview

This pair activity is designed to encourage reading, writing, speaking and listening in relation to numbers.

It will enhance learners' capacity to:

- Interpret the value of numbers written in symbols (place value)
- Articulate the value of numbers using words
- Translate between numbers written in figures and spoken English

As a pair activity it is:

- A non-threatening way to encourage students to speak numbers aloud
- A means of fostering interaction between students
- A useful activity to add variety to a long session
- Adaptable to a variety of levels within one class
- An activity which can be revisited at regular intervals
- Especially useful if English is not the students' first language

Suggested Procedure

The activity is best explained by physically demonstrating as you explain the procedure.

- Ask for a volunteer to act out the roles with you to make it clear.
- Write up a number such as 2,387 on a piece of paper in order to demonstrate.
- Your volunteer will need a pen and paper to write on.

Skills and Knowledge

- Speaking, reading, writing and listening with whole numbers using Australian notation
- Place value of whole numbers

Preparation and Materials

Photocopy Activity Sheets 1 and 2 onto card or coloured paper (1 of each per pair of students).

Cut out the cards, arrange them in sets (using a paper clip) and sort into labelled envelopes.

Note:

- The sets can be left on one strip of paper rather than cutting into separate cards if you think your students will not be daunted by seeing the whole set at once.
- The sets of numbers increase in difficulty from Set 1 to Set 8. So not all of them may be required the first time you use the activity with your group.
- Activity Sheet 3, *The Blank Sets* may be used to create further sets by inserting in numbers that suit your students' needs.



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Introducing the activity

Explain:

- *This activity will give you practice at saying numbers aloud.*
- *Also at writing numbers when you hear them spoken.*
- *I will give each of you a set of numbers.*
- *You will take it in turns so you both have a turn at reading as well as listening and writing the numbers.*

Demonstrate with a volunteer, move your chairs back to back.

Explain:

- *You will sit back to back – so that you cannot see your partner's numbers.*
- *Pretend you are on the phone speaking – so you have to **listen** not look at the numbers.*
- *You have to read them in full so that the other person can understand them.*
- *You cannot read them out like you would read a phone number.*
- *For example my number is “Two thousand, three hundred **and** eighty-seven”. Not “two, three, eight, seven”.*
- *My partner will write down the number she/he hears me say.*
- *At the end we will compare what my partner wrote with the numbers I started with.*

Briefly go through the procedure of speaking the number, getting the students to write it (in numerals not words) and checking the number together.

Writing large numbers

Write the number **2387** on the board **without the comma** saying it again aloud as you do.

Ask:

- *Is this what she/he should have written?*
- *Is that enough, have I left anything out?*

Discuss the placement of a comma between the 2 and 3 as a marker to separate the thousands from the hundreds [2,387].

Cultural differences in notation

Ask:

- *Have you seen this before?*
- *Are you used to writing it like this?*
- *Or do you know a different way?*

If it is relevant to any of your students, explain that in the majority of countries in Europe, a point is used as a marker for thousands and the comma is used where Australians use the decimal point. This is also true in the countries Europeans colonised, such as Cambodia & Indonesia.

Remember: Emphasise that their notation is not wrong; it is just different from the norm here.

Note: The use of commas is not a trivial issue for students who grew up in other cultures. The way we write and read numbers in our own culture becomes embedded into our language and our way of thinking. Changing it is not easy. Plenty of practice and focus is needed to help student do this.



Also draw students' attention to the 'and' before the 'eighty seven'. This is another feature of the English and Australian way of saying numbers that is not necessarily shared in other languages.

Extending the pattern of notation

Depending on the students' capacity with numbers at this stage, you might want to show them how this pattern of using the of comma repeats after every three digits, making it easier to distinguish the size of numbers than if they were written without commas. For example 2,387,456 is "Two million, three hundred and eighty-seven **thousand**, four hundred and fifty-six."

Warning: Do not talk about this if students are not yet comfortable with smaller numbers.

Conducting the activity

Arrange the students in pairs (2 students of roughly equivalent standard is helpful for this activity)

Distribute Set 1 to one student and Set 2 to their partner.

These two fairly straightforward sets should build student confidence and allow them to get used to the activity. If they do not find them easy then you can backtrack with simpler numbers.

Explain:

- *You should take it in turns to read and write your numbers.*
- *When you have finished compare your numbers.*
- *Make sure you find out the cause of any mistakes – they could be reading or writing mistakes.*
- *If you don't agree and can't work out what went wrong in the reading and writing then call me for help.*
- *When you are happy that you can do these sets correctly let me know and I will give you more numbers.*

Circulate and listen to the students, distributing the slightly harder sets of numbers as they are ready for them. If mistakes are being made with the easier sets then create more of your own for students to practice at an appropriate standard, either now or later.



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Activity Sheet 1

 Copy and cut.

Set 1 number 1 70	Set 2 number 1 50
Set 1 number 2 890	Set 2 number 2 201
Set 1 number 3 605	Set 2 number 3 740
Set 2 number 4 9,000	Set 2 number 4 3,000
Set 1 number 5 2,300	Set 2 number 5 6,800

Set 3 number 1 417	Set 4 number 1 719
Set 3 number 2 903	Set 4 number 2 806
Set 3 number 3 725	Set 4 number 3 692
Set 3 number 4 1,900	Set 4 number 4 3,600
Set 3 number 5 5,267	Set 4 number 5 4,372



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Activity Sheet 2

 Copy and cut.

Set 5 number 1 1,400	Set 6 number 1 6,511
Set 5 number 2 5,136	Set 6 number 2 1,290
Set 5 number 3 21,467	Set 6 number 3 32,596
Set 5 number 4 2,070	Set 6 number 4 4,802
Set 5 number 5 520,000	Set 6 number 5 76,000

Set 7 number 1 59,015	Set 8 number 1 72,010
Set 7 number 2 421,000	Set 8 number 2 301,500
Set 7 number 3 906,400	Set 8 number 3 816,700
Set 7 number 4 1,200,000	Set 8 number 4 6,800,000
Set 7 number 5 29,005,000	Set 8 number 5 12,060,000



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Activity Sheet 3

 Copy and cut.

Set number 1	Set number 1
Set number 2	Set number 2
Set number 3	Set number 3
Set number 4	Set number 4
Set number 5	Set number 5

Set number 1	Set number 1
Set number 2	Set number 2
Set number 3	Set number 3
Set number 4	Set number 4



Set number 5

Set number 5

