

Helping Your Child with Place Value

Number · Foundation to Year 6 · Australian Curriculum Mathematics

Every number is built from digits. **Place value** tells us what each digit is **worth** — because the same digit can mean different things depending on where it sits. The 3 in 30 is worth ten times more than the 3 in 3. Your child builds this understanding step by step, from Foundation to Year 6.

Year level	What your child learns	What this looks like
Foundation	Numbers and counting Your child learns to count and recognise numbers to 20. No place value yet — just learning that numbers have a name, a symbol and a size. digit — the symbols 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 numeral — the written number, e.g. 14 quantity — how many things there are	Count objects together. "Show me 7 blocks." "Which group has more — 12 or 15?" Match numerals to groups.
Year 1	Tens and ones Your child learns that numbers are made of tens and ones . 35 = 3 tens and 5 ones Breaking a number into parts is called partitioning . A number line shows where numbers sit in order.	"Make 24 using 2 bundles of 10 straws and 4 loose straws." "What is the tens digit in 47?" Show numbers on a number line drawn on paper.
Year 2	Hundreds, tens and ones Your child adds hundreds to their understanding. 347 = 3 hundreds, 4 tens, 7 ones They learn to regroup (swap 10 ones for 1 ten) and rename numbers in different ways. Zero holds a place: 305 = 3 hundreds, 0 tens, 5 ones.	"What does the 4 mean in 347?" Answer: 4 tens = 40 "How else can you show 245?" Try: 24 tens and 5 ones
Year 3	Thousands and beyond The pattern of ones, tens, hundreds repeats inside every group of three digits. 1,574 = 1 thousand, 5 hundreds, 7 tens, 4 ones But it can also be renamed as: 15 hundreds, 7 tens, 4 ones Key words: thousands, ten-thousands, standard grouping (normal way), non-standard grouping (a different way that is still correct)	"What is the value of the 5 in 1,574?" Answer: 5 hundreds = 500 "How many hundreds in 3,200?" Answer: 32 hundreds
Year 4	Decimals — tenths and hundredths Your child extends place value past the ones column. A decimal point separates whole numbers from parts. 3.47 = 3 ones, 4 tenths, 7 hundredths tenths — one whole cut into 10 equal parts (0.1) hundredths — one whole cut into 100 equal parts (0.01) 10 hundredths = 1 tenth 10 tenths = 1 whole	"What does the 4 mean in 3.47?" Answer: 4 tenths = 0.4 "Is 0.3 bigger than 0.29? How do you know?" Hint: 0.3 = 0.30
Year 5	Thousandths — comparing decimals Your child now works with thousandths — one whole cut into 1,000 equal parts. 1.256 = 1 one, 2 tenths, 5 hundredths, 6 thousandths Each place is 10 times smaller than the one to its left. This is the multiplicative relationship between places.	"Which is bigger — 0.4 or 0.38?" Answer: 0.4 = 0.400, bigger "How many hundredths in 0.3?" Answer: 30 hundredths
Year 6	Powers of 10 and integers When you multiply by 10, digits move one place to the left . When you divide by 10, they move one place to the right . $3.47 \times 10 = 34.7$ $34.7 \div 10 = 3.47$ Your child also meets integers — whole numbers that include zero and go below zero . A negative number has a minus sign: -3, -10. negative number — a number less than zero	"What is 4.6×100?" Answer: 460 "Is -5 bigger or smaller than -2?" Answer: smaller (further below zero)

 Place value chart — every digit has a position and a value

Ten-Thousands	Thousands	Hundreds	Tens	Ones	.	Tenths	Hundredths	Thousandths	
1	2	3	4	5	.	6	7	8	
10,000	2,000	300	40	5		0.6	0.07	0.008	
Year 3+	Year 2+	Year 2	Year 1	Year 1		Year 4	Year 4	Year 5	

The number shown is 12,345.678 **Blue = whole number columns** **Green = decimal columns**

Helping at Home — Place Value

Worked examples and questions to ask · Foundation to Year 6

How it works — worked examples

Year 1 — Tens and ones

The number **35**

Tens	Ones
3 (= 30)	5 (= 5)

$$3 \text{ tens} + 5 \text{ ones} = 30 + 5 = 35$$

The digit 3 is worth **30**. The digit 5 is worth **5**. Same digits, different values!

Year 2 — Regrouping and renaming

The number **245** can be shown in different ways:

Standard way	Renamed — still correct!
2 hundreds, 4 tens, 5 ones	24 tens and 5 ones
$200 + 40 + 5$	$240 + 5$

All of these equal 245. **Renaming** doesn't change the number — just how we show it.

Year 4 — Decimals on a place value chart

The number **3.47**

Ones	.	Tenths	Hundredths
3	.	$4 = 0.4$	$7 = 0.07$

$$3 \text{ ones} + 4 \text{ tenths} + 7 \text{ hundredths}$$

$$= 3 + 0.4 + 0.07 = 3.47$$

Year 6 — Multiply and divide by 10

When you $\times 10$, digits move **one place LEFT** (the number gets bigger)

When you $\div 10$, digits move **one place RIGHT** (the number gets smaller)

Start	$\times 10$ (bigger)	$\div 10$ (smaller)
3.47	34.7	0.347
0.6	6	0.06
250	2,500	25

The digits move — the decimal point stays where it is.

Questions to ask your child

You do not need to know the answer. Just ask and let your child do the explaining!

F Foundation

- Can you count out 13 blocks for me?
- Which pile has more — this one or that one?
- Can you find the number 8 on this card?

1 Year 1

- What is the tens digit in 47?
- Make 36 using bundles of 10 and loose ones.
- Show me where 45 goes on this number line.

2 Year 2

- What does the 3 mean in 352? (3 hundreds = 300)
- What is 305 in hundreds, tens and ones? What does the zero mean?
- Can you show me 271 a different way?

3 Year 3

- What is the value of the 4 in 14,236?
- How many hundreds are in 3,500?
- Can you write four thousand, two hundred and six in digits?

4 Year 4

- What does the 7 mean in 3.47?
- Is 0.3 bigger or smaller than 0.29? How do you know?
- How many tenths are in 1 whole?

5 Year 5

- Which is bigger — 1.4 or 1.39?
- How many hundredths are in 0.4?
- Put these in order: 0.6, 0.52, 0.608

6 Year 6

- What is 3.6×100 ?
- What is $450 \div 10$?
- Is -4 bigger or smaller than -1 ? Why?

Things to try at home

Any age: Collect objects and count them. Group them into tens. How many tens? How many left over?	Year 1–2: Bundle 10 straws with a rubber band. Make different numbers. "Show me 43."
Year 2–3: Say a number out loud. Ask your child to write it — and tell you what each digit is worth.	Year 4: Look at price tags — \$3.47, \$12.90. What does each digit mean?
Year 5: Compare decimals on a petrol station sign or food label. Which is bigger?	Year 6: Times tables $\times 10$ challenge: $4.5 \times 10 = ?$ $0.37 \times 100 = ?$ $360 \div 10 = ?$

Key words to learn together

digit: the symbols 0–9 used to write numbers	numeral: the written number, e.g. 47 or 3.5
place value: the value of a digit based on its position	partition: break a number into its parts, e.g. $47 = 40 + 7$
regroup: swap 10 ones for 1 ten, or 10 tens for 1 hundred	rename: show the same number a different way, e.g. $245 = 24 \text{ tens} + 5 \text{ ones}$
decimal point: the dot that separates whole numbers from parts	tenths: one whole split into 10 equal parts (0.1)
hundredths: one whole split into 100 equal parts (0.01)	thousandths: one whole split into 1,000 equal parts (0.001)
integer: a whole number — can be positive, zero, or negative	