NUMBER SENSE AND ALGEBRA – OPERATING WITH DECIMALS (OwD)

OwD1 – UNDERSTANDING THE POSITIONAL VALUE OF DECIMALS

- ☐ I can use my knowledge of place value to help me add and subtract decimals of up to three decimal places

OwD2 – UNDERSTANDING AND ESTMATING THE RELATIVE SIZE OF DECIMALS

- ☐ I can identify the size of decimals and round to estimate solutions
- ☐ I can use estimation to help me find solutions to problems, e.g. $1.23 + 3.4 \neq 1.57$ $as\ the\ total\ must\ be\ greater\ than\ 4$

OwD3 – UNDERSTANDING THE EFFECTS OF MULTIPLICATION & DIVISION WITH DECIMALS

- ☐ I can understand that multiplying and dividing decimals by 10, 100, 1000 changes the place value of the numerals
- ☐ I can explain that multiplication does not always make the answer larger, e.g. $15 \times 0.5 = 7.5$
- ☐ I can convert decimals to fractions to assist with mental computation involving multiplication, e.g. $to\ find\ 16 \times 0.25, recognise\ 0.25\ as \frac{1}{4} then\ find\ one\ quarter\ of\ 16$
- ☐ I can convert decimals to fractions to assist with mental computation involving division, e.g. $to\ find\ 0.5 \div 0.25, recognise\ the\ answer\ is\ 2\ as\ there\ are\ two\ quarters\ in\ one\ half$

  I can match equivalent decimals to benchmark fractions, e.g. $\frac{1}{4} = 0.25, \frac{1}{2} = 0.5, \frac{3}{4} = 0.75, \frac{1}{10} = 0.1\ and\ \frac{1}{100} = 0.01$

OwD4 – FLEXIBLE STRATEGIES FOR MULTIPLICATION & DIVISION OF DECIMALS

- ☐ I can use my knowledge of place value to help me multiply and divide decimals
- ☐ I can use approximation to check the accuracy of solutions

This document has been adapted from the National Numeracy Learning Progression (NSW Syllabuses – May 2018)
http://educationstandards.nsw.edu.au/wps/wcm/connect/7a7c08ac-8c7b-43db-934b-4a71f46a790e/national-numeracy-learning-progression.pdf?MOD=AJPERES&CVID