2018 SEM 2 ELSP MATHEMATICS YR 3

What is it that we want our students to know, understand, do and communicate KUDCO?					
Year Level: Three	**Semester:** Two	**Subject:** Mathematics	**Team Members:** Matt Hart, Maree Caminiti, Melanie Axelson, Christine Kane, James Macdonell		
Essential Learning What is the essential learning? Describe in student friendly vocabulary.	**Example-Rigor** What does proficient student work look like? Provide an example and/or description.	**Prerequisite Skills Needed** What prior knowledge, skills and/or vocabulary are needed for a student to master this essential learning?	**Common Assessments** What assessment/s will be used to measure student mastery?	**When taught?** When will this essential learning be taught?	**Application Skills** What will we do when students have already learned this essential learning? https://drive.google.com/drive/folders/0B1dXdflrtuKuaEtuYjlnNVpFdDA

Minor: Multiplication facts
 	
I can explore simple number sequences and recall multiplication and division facts based on multiples of two, three, five and ten.
	I can skip count by 2's/3's/5's/10s.
	
	I can recall the multiplication facts of the 2's/3's/5's/10s in sequence and out of sequence;
	eg: I know that 7x5 = 35
	
	I can recall the related division fact for a multiplication number sentence.
	eg: If I know that 7x5 = 35, then I know that 35/7=5
	
	I can explain the inverse link between multiplication and division. (fact families/three for free)
		I can recognise increasing and decreasing number patterns involving 2's/3's/5's/10's
		
		I know division as sharing into equal groups.
		
		I know the operational signs 'x' and '÷'
			Pre CFA: T3 W1
			
			Quick checks and exit tickets.
			
			Student work samples and Proficiency Scales.
			
			Post CFA/Proficiency Scale conferences: End of unit.
				MINOR Term 3: W1-W9	Automatic recall of multiplication facts: 2's/3's/5's/10's
					
					Recall of multiplication facts and related division facts:
					  a. fours and eights
					  b. sixes and nines
					  c. sevens

*Working in Collaborative teams, examine all relevant documents, school scope and sequence, regional documents and AusVELS, and then apply the criteria of endurance, leverage and readiness to determine which standards are essential for all students to master. Remember, less is more. For each standard selected, complete the remaining columns. Complete the chart by the second or third week of each term/semester.
BLUE= Number and Algebra, RED= Measurement and Geometry, GREEN= Statistics and Probability.

2018 SEM 2 ELSP MATHEMATICS YR 3

| **Major: Multiplication strategies**

I can solve problems using efficient strategies for multiplication. | **Written strategies:**
I can use arrays to solve multiplication problems.

• • • • •
• • • • •
• • • • •
• • • • •

4 X 5 = 20

I can use repeated addition to solve multiplication problems.

I can use groups of to solve multiplication problems.

I can use part-part-whole to solve multiplication problems.

| 20 |
| 5 | 5 | 5 | 5 |
4 X 5 = 20

Mental strategies:
I can use near doubles and doubles to solve multiplication problems

I can use estimation to solve multiplication problems | I can recognise increasing and decreasing number patterns involving 2's/3's/5's/10's

I can explain what an array is for multiplication

I know the operational signs 'x' and '÷'

Guaranteed
Efficient Strategies
Supportive
Mental Strategies
Written Strategies | Pre CFA: T3 W1

Quick checks and exit tickets.

Student work samples and Proficiency Scales.

Post CFA/Proficiency Scale conferences: End of unit. | Term 3: W1-W4 | I can solve problems using efficient strategies for Division.

Reasonable estimation of division.

Choose and justify an appropriate strategy that suits the context. |

*Working in Collaborative teams, examine all relevant documents, school scope and sequence, regional documents and AusVELS, and then apply the criteria of endurance, leverage and readiness to determine which standards are essential for all students to master. Remember, less is more. For each standard selected, complete the remaining columns. Complete the chart by the second or third week of each term/semester.
BLUE= Number and Algebra, RED= Measurement and Geometry, GREEN= Statistics and Probability.

	I can use skip counting to solve multiplication problems **Digital Strategies** I can use digital technology including computers and calculators to solve problems and check my estimations				
Major: Money I can represent values of money in a variety of ways and count change to the nearest 5 cents.	I can show monetary values in different forms up to $100. Show my ability to count change using a strategy: -Shopkeeper Strategy -Other: _____ I can calculate change to the nearest 5 cents	I know the difference between dollars and cents. I can identify the coins and notes of Australian currency. **Guaranteed** Change	Pre CFA Anecdotal notes Quick checks-verbal and non verbal	Term 3 W5-8	I can solve problems about buying things and work out change to the nearest five cents with and without digital technologies. Calculate a series of purchases using a running total Count change when buying multiple items at once
Major: Fractions I can model and represent unit fractions including 1/2, 1/4, 1/3, ⅕ and ⅛ and multiples of these to make a whole.	Calculate how many unit fractions make a whole Make, draw and identify 1/2, 1/4, 1/3, ⅕ and ⅛ in the area, collection and linear models. Represent multiples of unit fractions.	-Divide shapes into 1/2 and 1/4 and ⅛ -Divide collections into 1/2 and 1/4 and ⅛	**Fractions Pre** CFA Quick checks and exit tickets. Student work samples and Proficiency Scales- used throughout unit.	Term 4: W1-W5	Create incorrect models of unit fractions, evaluate why they are incorrect and justify my reasoning across all three models
Minor Time: I can tell time to the	I can explain the connection between... -seconds and minutes	I can tell the time to the nearest quarter hour (analogue clock face)	Time Pre CFA Quick checks and exit	**MAJOR** Term 3: W9-W10	I can estimate and justify the time based only on the

*Working in Collaborative teams, examine all relevant documents, school scope and sequence, regional documents and AusVELS, and then apply the criteria of endurance, leverage and readiness to determine which standards are essential for all students to master. Remember, less is more. For each standard selected, complete the remaining columns. Complete the chart by the second or third week of each term/semester.

BLUE= Number and Algebra, RED= Measurement and Geometry, GREEN= Statistics and Probability.

nearest minute.	-minutes and hours I can tell time to the nearest minute (analogue clock face) I can estimate time using my prerequisite skills (benchmarks)	I can tell the time to the nearest half hour (analogue clock face) I can tell the time to the nearest hour (analogue clock face) **Guaranteed** Minute	tickets. Student work samples and Proficiency Scales- used throughout unit.	**MINOR** Term 4: W1-W3 (to run alongside fractions Major unit)	position of the hour hand I can read an analogue clock and record it on a digital clock and vica versa.
Major: **Maps:** I can create and interpret simple grid maps to show positions and pathways	**I can:** ● Create a simple grid map to show a pathway ● Read a simple grid map and interpret a pathway ● Create a simple grid map to show the location of items/places ● Read a simple grid map and locate positions of items/places	**I can:** ● Identify the positions of key features (using words like: next to, near, above, below etc.) ● Explain what a simple map is showing **Guaranteed** Pathways Grid Map	Grid map pre CFA Quick checks and exit tickets. Student work samples and Proficiency Scales- used throughout unit. *Data from Sem 1	**MAJOR** Term 4: W7-W9	Create detailed maps that show both positions and pathways.
Minor: **Angles** I can recognise and use angles of turn in everyday situations.	I can compare angle sizes in everyday situations I can describe an angle as a measure of turn I can estimate angles in everyday life, using everyday language	I can describe turns as a half turn, quarter turn or full turn. I know the characteristics of a line (they don't bend).	Angles pre CFA Quick checks and exit tickets. Student work samples and Proficiency Scales- used throughout unit. *Data from Sem 1	**MAJOR** Term 4: W7-W9	I can apply my knowledge of angles to problem solving situations. (Instructions, directions, pathways, worded problems)

*Working in Collaborative teams, examine all relevant documents, school scope and sequence, regional documents and AusVELS, and then apply the criteria of endurance, leverage and readiness to determine which standards are essential for all students to master. Remember, less is more. For each standard selected, complete the remaining columns. Complete the chart by the second or third week of each term/semester.
BLUE= Number and Algebra, RED= Measurement and Geometry, GREEN= Statistics and Probability.

	I can identify situations where angles appear in everyday life: clock face, Letters, corners 2D shapes, rotations etc				
Minor: **Chance:** I can conduct chance experiments, identify possible outcomes and recognise variations in results.	I can recognise how results may change I can conduct a Chance experiment	I can create a probability line of chance events that uses chance language. **Guaranteed** Chance experiments Variations **Supportive Vocabulary:** I can use Chance vocabulary such as: Certain, Less Likely, More Likely, Likely, Even Chance, Unlikely and Impossible etc.	Chance pre CFA Quick checks and exit tickets. Student work samples and Proficiency Scales- used throughout unit. *Date from Sem 1	**MINOR** Term 4: W4-W5	I can explain the difference between dependent and independent events. I can create my own chance experiments

*Working in Collaborative teams, examine all relevant documents, school scope and sequence, regional documents and AusVELS, and then apply the criteria of endurance, leverage and readiness to determine which standards are essential for all students to master. Remember, less is more. For each standard selected, complete the remaining columns. Complete the chart by the second or third week of each term/semester.
BLUE= Number and Algebra, RED= Measurement and Geometry, GREEN= Statistics and Probability.