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| STRAND: Number + Measurement SUBSTRAND: Whole Number (A) + Time (A) STAGE: Stage 2 |
| TERM: | 1 | 2 | 3 | 4 | WEEK: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| AHC-ICON-Aboriginal Torres Strait Islander histories-300dpiAboriginal and Torres Strait Islander histories and cultures | A-ICON-Asia Australias engagement with Asia-300dpiAsia and Australia’s engagement with Asia | S-ICON-Sustainability-300dpiSustainability | CCT-ICON-critical creative thinking-300dpiCritical and creative thinking | EU-ICON-ethical understanding-300dpiEthical understanding | ICT-ICON-300dpiInformation and communication technology capability | IU-ICON-intercultural understanding-300dpiIntercultural understanding | L-ICON-literacy 300dpiLiteracy | N-ICON-numeracy-300dpiNumeracy\* | PSC-ICON-personal social capability-300dpiPersonal and social capability | WE-work and enterprise-300dpiWork and enterprise |
| ***What are we learning to do (WALT):*** Count forwards and backwards by tens and hundreds from any starting point.State the place value of digits in numbers up to four digits.Read and interpret simple timetables, timelines and calendars |
| ***Adjustment:*** | **Post Assessment Highlighted**  |
| **TEACHING AND LEARNING ACTIVITIES** | **REG** |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** |
| ***What I’m Looking For (WILF):*** ***To count forward and backwards from a given point and state place value*** | ***What I’m Looking For (WILF):*** ***To count forward and backwards from a given point and state place value*** | ***What I’m Looking For (WILF):*** ***To count forward and backwards from a given point and state place value*** | ***What I’m Looking For (WILF):***  ***To read and interpret a timeline and a tv guide timetable*** |
| **Lesson Breakers** **Secret Number** | **Lesson Breakers****Celebrity Head** | **Lesson Breakers****Go to BreakTime** | **Lesson Breakers** |
| **Introduction**

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| **Maths Tipping.** Students stand around the room. Make a set of three, four digit number cards. Ask questions such as: how many tens altogether in 500? What number is 100 more than 602? What is the number 100 before 1469? The student who answers correctly may take one step towards another student. If that student is tipped they sit down. *Variation: can ask students to state the number before and after.*  |

 | **Introduction**

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| **Counting Races** Students are divided into two groups. The teacher nominates a starting number eg 231. One group counts by tens, while the other counts by hundreds from the starting number. Both groups start counting and are asked to stop at the same time. Before commencing the activity, students discuss: ❚ will both groups start/finish on the same number? Why? ❚ which group will stop on the highest number? Why? ❚ will both groups count number 281? Why?/Why not? ❚ what are some of the numbers both groups will count? ❚ what is a number only your group will count? *Variation:* Students play ‘Buzz’ counting by tens on and off the decade. They ‘buzz’ on the hundreds. Changing to 4 digit numbers. Count backwards as well as forwards.  |

 | **Introduction**

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|  **Higher or Lower** * Students play in groups of three (2 players and 1 adjudicator) ‘Higher or Lower’. The adjudicator records a ‘secret’ three-digit number on a card and states the boundaries for the number eg ‘The number is between 4000 and 5000.’ Students draw their own number line, marking the boundaries for the number. The first player chooses a number in the range and the adjudicator responds by stating whether the number is higher or lower than the one chosen. The players record the response on their
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 Numberline * The second player then states a number and the adjudicator responds with ‘higher’ or ‘lower’. The game continues until a player gives the correct number.
* Students discuss the strategies they used to determine the secret number.
* In small groups, throw three dice. Use that number to count on/back by 10s, 100s or 1000s.
* In small groups, use calculators to add/subtract by 10s and 100s. One student types number on calculator, next student then adds/subtract by 10s or 100s and checks answer.
 | **Introduction**TimelineProvide copies of attached timeline. Read and discuss with class and have students unjumble timeline and glue in correct order. |
| **Body****Count -Off** Roll a ten-sided (decahedron) or a twelve-sided (dodecahedron) die. Have the students start counting from the number rolled, adding ten to the count each time up to the 90s. Then count backwards by tens. Display a hundred chart to the students. Have one student select a number from 1–9 on the hundred chart and call out the number. Once the student calls out the selected number, the rest of the class continue counting by adding ten each time. The first student may continue to locate each number after it has been called. *Variation:* Use a 1000 number chart and count by hundreds. **Developing Efficient Numeracy Strategies****2(DENS 2)- Stage 2 pp 62-63**  | **Body****Number Line Counting** Display a 0 –100 number line to the students. Ask a student to nominate a single-digit number from which to begin counting. Encourage the students to count along the line for ten counts from the nominated number. Attach a peg, or paperclip, to the last number of the count. Continue by counting on ten more each time and marking the last number counted. Chant the sequence of “marked” numbers. Repeat the process, starting from a different single-digit. After a few turns, discuss other sequences without having to mark each number first. **Developing Efficient Numeracy Strategies 2(DENS 2)- Stage 2 pp 64-65**  | **Body****Hands Up** Ask a student to come to the front of the class and hold up ten fingers. Then ask the student to demonstrate a number such as “43” using fingers. If the student is hesitant, suggest that friends may help in the demonstration by raising their fingers as well. Ask the class to check the number of fingers by counting groups of tens and then adding the ones. Then ask the class to check the number again, this time by counting from the “ones” first and then counting on by “tens”. In the example of “make 43” the counting sequence would be 10, 20, 30, 40, 41, 42, 43 and then 3, 13, 23, 33, 43. Repeat with various other numbers. When the class is confident in representing numbers in this way, expand the activity to representing two numbers and adding them together. **Variation** Have one student represent a two-digit number using as many students’ hands as needed, without stating what the number is. Each member of the class then determines and records the number. **Developing Efficient Numeracy Strategies 2(DENS 2)- Stage 2 pp 66-67**  | **Body****Television Viewing** Students collect a variety of television guides from different sources eg magazines, newspapers. Students identify and discuss common features. Students then plan an evening of television viewing and record their plan in a table eg Students use a simple timetable. Possible questions include: ❚ can you convert the digital times to analog times? ❚ what information can you interpret from a timetable? .  |
| **Conclusion** **Calculators** Students are given a calculator to type in a three digit number. Without speaking, students order themselves based on their calculator number. If they are incorrect they sit out. Increase the number of digits and repeat. Can students order five and six digit numbers? Use a variety of pages from an old phone book (not in consecutive order). Ask students to put the pages in order from lowest to highest. (or highest to lowest). Can they identify a page that is missing – how do they know where the page goes?  | **Conclusion****Bingo** Students make up a bingo card (3 x 3) and fill it with three-digit numbers e.g. using the digits 6, 3, 2, 5 and 0. The teacher reads a clue, e.g. the number 100 more than 256. If the student has that number, they cross it out. First to three in a row, column or diagonal is the winner. *Variation:* modify to include 4 digit numbers | **Conclusion****Problem Solving and Problem Posing** Students solve a variety of problems using a large number of strategies. The teacher should encourage students to pose their own problems involving numbers of up to four digits.  | **Conclusion**<http://www.bestschoolgames.com/educational-games/magic-calendar/><http://mrnussbaum.com/calendarclowns/><http://www.softschools.com/math/calendar>/activities/calendar\_game/ |
| **Resources*** Hundreds chart /thousands chart
* ten-sided (decahedron) or a twelve-sided (dodecahedron) die
* Calculators
* 3 and 4 digit number cards
 | **Resources*** 3x3 bingo cards
* 0 to 100 numberline
* pegs
 | **Resources*** Paper of personal numberlines
* 3 digit numeral cards
* Word problems
 | **Resources*** Tv guides
* magazines

<http://www.bestschoolgames.com/educational-games/magic-calendar/><http://mrnussbaum.com/calendarclowns/><http://www.softschools.com/math/calendar>/activities/calendar\_game/ |
| **Reflection/Check In** | **Reflection/Check In** | **Reflection/Check In** | **Reflection/Check In** |