

1. **SWITCHED ON – Games Unit**

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation				
1	M4.2	<p>Requirements of students - list of all steps required to be able to create own computer game.</p> <p>What is a game? any form of play; amusement; recreation; sport</p> <p>What is a computer game? A software program in which one or more players make decisions through the control of game objects and resources, in pursuit of a goal. Students may list:</p> <ul style="list-style-type: none"> • Making decisions • Involves players • About control • Game objects and resources • Needs a goal <p>What makes a game good or bad?</p> <ul style="list-style-type: none"> • Pacman • Space Invaders • Frogger • Donkey Kong • Tetris <p>http://www.80musiclyrics.com/games.shtml</p>	<p>Hand out letter to students stating what will be required of them this semester.</p> <p>Think – Pair – Share: students fill in a Concept Map determining their existing knowledge of what a game is. Students then determine if any of the descriptions match for computer games only. If so have them highlight those written. If they wish to add anything, write it in a different coloured pen.</p> <p>Examine games in list from the 1980's that are still successful.</p> <p>Even though they have very old looking graphics and sound quality is poor, people still like to play them. Compare / contrast good and bad points about them in a T Organiser Chart (groups of 3).</p>	1, 1,3,5,7,8,9,10,11,12,14,18,19,24,27,29,30,36,39,40,	<ol style="list-style-type: none"> 1. defining 2. fluency 3. knowing 4. labelling 5. listing 6. locating 7. naming 8. remembering 9. retelling 10. stating 11. describing 12. explaining 13. interpreting 14. outlining 15. restating 16. understanding 17. applying 18. compiling 19. completing 20. constructing 21. demonstrating 22. illustrating 23. inferring 24. showing 25. solving 26. using 27. analysing 28. categorising 29. comparing 30. contrasting 31. deeper thinking 32. differentiating 33. discussing 	<p>Concept Map</p> <p>T- Organiser Chart</p> <p>Attributes of Games of 80's</p> <table border="1"> <thead> <tr> <th>Good</th> <th>Bad</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> </tr> </tbody> </table>	Good	Bad			<p>Week 1</p> <p>Measurement Time</p> <p>Construct a timeline of the changes in computer games from their introduction in 1962. "Spacewar"</p> <p>http://www.thedot eaters.com/play1 sta1.htm</p>
Good	Bad										

3.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
2?= 11	CU4.1 CU4.2 CU4.3	<p>Demonstration tutorials to watch before creating each of the 4 type games: (from ICT Mindtools)</p> <ul style="list-style-type: none"> The Treasure Hunter Demonstration before Maze Game Knock the Nasties Demonstration before Alien Game Space destroyer Demonstration before Space Game <p>http://www.leo.eq.edu.au/knptutorials.htm</p> <p>Four types of Arcade games students will make are:</p> <ul style="list-style-type: none"> Maze Game Platform Game (jumping up on platforms collecting items) Space Game (shooting) First Alien Game (catching a ball) Own choice <p>http://www.mindtools.tased.edu.au/default.htm</p>	<p>Reading Groups:</p> <p>Guided Reading- Using laptop as an aid students read through instructions for creating game using Klik & Play. Watch video clips to help understanding.</p> <p>Computers – Use Klik & Play to create games.</p> <p>Thinking Skills – Design, debate, review, answer questions, create,</p> <p>Journal – Write thoughts, ideas about games, what students are learning, successes and problems with creating games, drawings, game designs and characters.</p> <p>Games – Modding simple existing games after playing them eg cards, poker, connect 4 to make them more interesting and more of a challenge.</p>	<p>2,3,6,17,</p> <p>3,6,8,16,17,26,31,33,34,35,36,37,39,40,41,47,48,49,50,54,57,59,60</p> <p>1,2,3,5,8,9,10,11,12,14,15,16,18,22,24,27,36,</p> <p>1,3,4,8,10,11,12,14,15,16,17,18,19,20,21,22,24,26,27,31,33,34,35,36,39,40,41,45,47,48,49,50,54,55,57,58,59</p>	<ol style="list-style-type: none"> defining fluency knowing labelling listing locating naming remembering retelling stating describing explaining interpreting outlining restating understanding applying compiling completing constructing demonstrating illustrating inferring showing solving using analysing categorising comparing contrasting deeper thinking differentiating discussing 	<p>4 Games</p> <ul style="list-style-type: none"> Maze Platform Space Alien Own Choice <p>Modified Game</p>	(see above)

4.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
3	CD4.1	<p>Game Review Genre</p> <ul style="list-style-type: none"> • Setting • Characters • What the player has to do • Goal or objective • Storyline • Reasons for it being good or bad • Recommendation to others <p>Own Review</p>	<p>Examine & deconstruct some reviews of computer games (eg Age of Empires III, Sims 2, Field Commander) Note:-</p> <ul style="list-style-type: none"> • Ratings (out of 10 or stars) • Graphics • Game play • Sounds • Value for money • Indication of genre • Storyline • Characters • Good and bad points <p>Students choose a game they have played. Then they write a review including all of the things listed above.</p>		34. distinguishing 35. examining 36. identifying 37. investigating 38. assessing 39. choosing 40. deciding 41. determining 42. judging 43. justifying 44. prioritising 45. recommending 46. verifying 47. complexity 48. designing 49. elaborating 50. flexibility 51. forecasting 52. formulating 53. hypothesising 54. modifying 55. organising 56. originality 57. planning 58. proposing 59. risk-taking 60. synthesising	Review	<p>Week 3 Chance</p> <p>How could you modify a board game to increase your likelihood of winning?</p> <ul style="list-style-type: none"> • change one side of die to “miss a turn” • extra snakes added <p>Conduct experiments to see how the likelihood of winning a game alters as the rules are changed.</p> <p>Week 4 & 5 Students play Math’s Games from Website “Interactive maths – making learning of maths fun” Woodlands Games http://www.woodlands-junior.kent.sch.uk/maths/index.html They then try to:-</p>
4-5	OP4.1 OP4.2 OP4.3 PD4.4	<p>What Effect can playing & making games have on us?</p> <p>POSITIVE:- Encourages</p> <ul style="list-style-type: none"> • inquiring & reflective thinkers • ability to reason • ability to question • making decisions • solving complex problems • involves cognitive skills • application of strategies of 	<p>Students debate topic (public forum??) “To Tune in or Tune Out?” after investigating the Pros & Cons of playing computer games. The discussion for this can be done during Reading Groups in <u>Thinking Skills</u> time.</p>	1,2,3,5,6,7,10,11,12,14 16,18,20,21,27,33,37, 39,40,52,53,55,56,57, 59,			

5.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
4-5	OP4.1 OP4.2 OP4.3 PD4.4	<p>thinking, particularly logic and problem solving. MAKING GAMES – POSITIVES</p> <ul style="list-style-type: none"> It is a creative activity that can bring together logic, music, mathematics, artwork, planning, teamwork and general ICT skills into a task that children find genuinely motivating. Students learn that defining a purpose is important & planning and testing is crucial to success Provides practice in identifying problems, clarifying the issues involved & choosing & monitoring the most effective solutions. Gives opportunities to begin with concrete graphical objects progressing to more abstract concepts. Enables students to generalise from specific instances, to systematically examine & represent complex situations, to test by seeking counter-example, and to analyse & represent tasks & operations 	<p>Students research data from internet sites, TV and newspapers to help them with their arguments. Worthwhile reports are:-</p> <ul style="list-style-type: none"> “Parents and experts debate the effects of video games, TV, movies and computers” Written report of TV Documentary by Mike Antonucci “Are Computer Games Rebooting Our Minds?” Article by David Secko “Techtots Generation” Newspaper – Knight Ridder “The World of Electronic Games” Internet Site – The Tide Online June 27, 2006 “Games Paused” The Mercury News by Mike Antonucci “Turn on the Playstation and do your Homework” Arthur Macmillan Ed. Correspondent 	1,2,3,5,6,7,10,11,12,14 16,18,20,21,27,33,37, 39,40,52,53,55,56,57, 59,	<ol style="list-style-type: none"> defining fluency knowing labelling listing locating naming remembering retelling stating describing explaining interpreting outlining restating understanding applying compiling completing constructing demonstrating illustrating inferring showing solving using analysing categorising comparing contrasting deeper thinking differentiating discussing 	?á	<ul style="list-style-type: none"> Identify which of the game genres was used to make game. What mathematical concept was learnt through playing the game? Was it successful? Could it have been taught a better way? If yes, how? <p>Students then plan how to create a game that teaches a Math’s concept, where results are low, using any of the Klik & Play Genres they’ve been taught so far. Students do test after playing game to see if results have improved.</p>

6.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
4-5	OP4.1 OP4.2 OP4.3 PD4.4	<p>PLAYING GAMES – NEGATIVES <u>Game addiction – Virtual Reality</u> Use of above reports plus examples of where young men / students have</p> <ul style="list-style-type: none"> • committed suicide • lack of energy • loss of sleep (insomnia) • eating disorders • long breaks from study • no social contacts • no real friends • ignoring family • quitting job • depression • schizoid personality disorder • limited range of emotions in social settings • compulsive behaviour • gambling addicts online • shopping addicts online • seizures • heart failure (after 50 hrs straight on computer game) • housebound • potential for abuse 	<p>Worthwhile reports are:-</p> <ul style="list-style-type: none"> • “Excessive gaming poses dangers, some say” The Dallas Morning News June 26, 2006 • “How do games affect us?” http://www.mindtools.tased.edu.au/games/how_do_games_affect_us.htm • “Death of a game addict” Journal Sentinel by Stanley A. Miller II March 31, 2002 <p>Students are put into either the affirmative or negative for the debate “To Tune in or Tune Out”</p>	1,2,3,5,6,7,10,11,12,14 16,18,20,21,27,33,37, 39,40,52,53,55,56,57, 59,	34. distinguishing 35. examining 36. identifying 37. investigating 38. assessing 39. choosing 40. deciding 41. determining 42. judging 43. justifying 44. prioritising 45. recommending 46. verifying 47. complexity 48. designing 49. elaborating 50. flexibility 51. forecasting 52. formulating 53. hypothesising 54. modifying 55. organising 56. originality 57. planning 58. proposing 59. risk-taking 60. synthesising	debate	(cont.)

7.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
6-8	S4.2 M4.1 TP4.1 TP4.2 TP4.3 TP4.4	<p>TO BE DONE ONLY WHEN STUDENTS HAVE COMPLETED MAKING ALL 4 TYPE GAMES IN KLIK & PLAY</p> <p>Designing Own Game: Arcade or Puzzle to start. (see sheet from Mindtools)</p> <p>GAME IDEA</p> <ul style="list-style-type: none"> • challenges • environment • characters • how to begin • what's to happen • main goals or rewards • cause of ending or moving to next frame <p>GAME STORY</p> <ul style="list-style-type: none"> • What's it called? • What will happen in beginning, middle & end? • What will player have to do? • Will there be puzzles to solve? • What will the player have to do to finish or win? <p>MAIN CHARACTER</p> <ul style="list-style-type: none"> • What's he/she called? • Looks like? • How does it move? • What else does he/she do? 	<p>Working with teacher design an assessment rubric for own created game.</p> <p>Write in Journal (Reading Gps) the game story. See list in content.</p> <p>Once a simple game is working add in features to make it look more professional and more fun to play.</p> <p>Use Klik & Play during Computer Time (Reading Gps) & when booked onto Library computers.</p> <p>Create a life for main character.</p>	2,3,8,10,11,12,14,16,17,19,20,21,22,23,25,26,27,31,32,33,34,35,38,39,40,41,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60.	<ol style="list-style-type: none"> 1. defining 2. fluency 3. knowing 4. labelling 5. listing 6. locating 7. naming 8. remembering 9. retelling 10. stating 11. describing 12. explaining 13. interpreting 14. outlining 15. restating 16. understanding 17. applying 18. compiling 19. completing 20. constructing 21. demonstrating 22. illustrating 23. inferring 24. showing 25. solving 26. using 27. analysing 28. categorising 29. comparing 30. contrasting 31. deeper thinking 32. differentiating 33. discussing 	<p>rubric</p> <p>game story</p>	<p>Week 6 Space <u>Location, Direction & Movement</u> <u>Measurement length</u> Design a course for a scavenger hunt. You may use the following</p> <ul style="list-style-type: none"> • compass points • angles of turn • units of length • clues <p>Week 7 Number <u>Number Concepts</u> After playing "Dice a Fraction", create a game to teach equivalent fractions or % using a dice.</p> <p>Week 8 <u>Money</u> Budgeting: Using catalogues design & create a games room. Given \$5000 to start with which covers everything.</p>

9.

SWITCHED ON – Games Unit

Wk	Outcome	Content	Strategies/Processes How	Skill No.	Skills/Indicators	Product	Linked Maths Investigation
11	M4.2 S4.2 PD4.4	<p>Sharing of games with peers</p> <p>Best Game Categories:- egs</p> <ul style="list-style-type: none"> • Best platform game • Best maze game • Best shooting game • Best puzzle game • Most challenging • Most creative • Most professional • Best sounds • Best graphics • Best storyline • Best characters • Most exciting <p>Rest of students in school determine winner of OVERALL BEST GAME.</p>	<p>During the week students play each others games giving feedback through using a rating system. These results will determine the winners of different type games.</p> <p>Students create the categories for them to compete in.</p> <p>Choose overall winners of various categories through collating results.</p> <p>Invite all the classes from the school up to the room to play all of the games and then have them give a rating (use slip provided and created by students in 6/7).</p> <p>Present with certificates on Parade.</p>	16,17,19,21,24,26,27,28,29,30,35,36,38,39,40,42,45,60	<ol style="list-style-type: none"> 1. defining 2. fluency 3. knowing 4. labelling 5. listing 6. locating 7. naming 8. remembering 9. retelling 10. stating 11. describing 12. explaining 13. interpreting 14. outlining 15. restating 16. understanding 17. applying 18. compiling 19. completing 20. constructing 21. demonstrating 22. illustrating 23. inferring 24. showing 25. solving 26. using 27. analysing 28. categorising 29. comparing 30. contrasting 31. deeper thinking 32. differentiating 33. discussing 	selection of computer games created by students	<p>Week 10 Measurement <u>Timetabling</u> How will we manage all of the children in the school coming up to play our games? Students plan, develop and organise a calendar / timetable to help organise event.</p> <p>Week 11 Patterns & Algebra <u>Patterns / Functions</u></p> <ul style="list-style-type: none"> • Examine results from voting slips to identify a pattern re: age or gender of player. • Brick Game Design & construct a wall without any fault lines.

10.

SWITCHED ON – Games Unit