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Year 5 Lesson 4- Pacman4



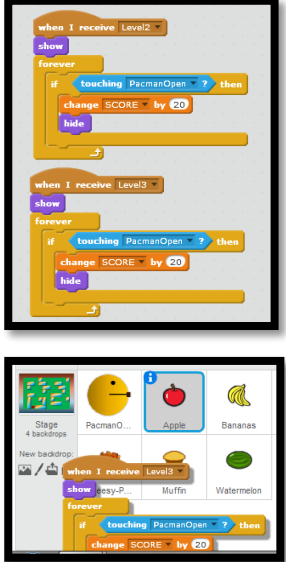
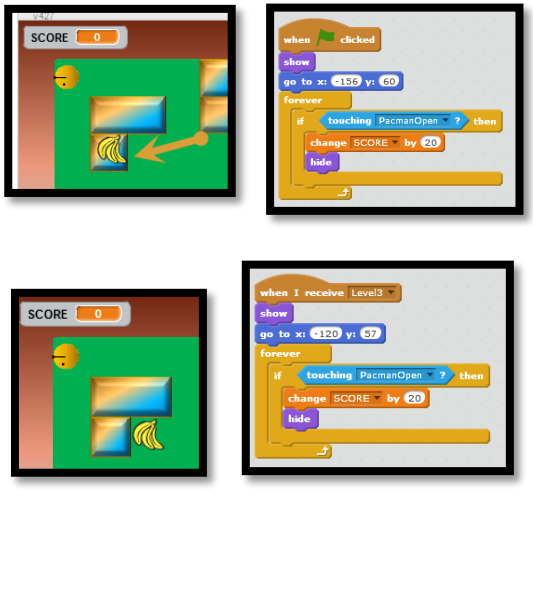
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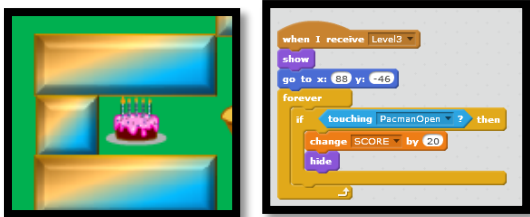
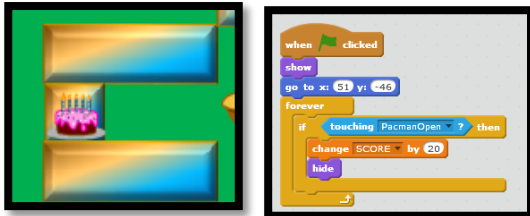
*Resources - Scratch 2 application; Y5L4 Pacman4 S2-0 folder, which contains Y5L4 Pacman4 Help Tutorial PR.pdf (hardcopy) to be used as pupil evidence inside their ICT folder; pencil, to tick off each task on the Y5L4 Pacman4 Help Tutorial PR, pupil videos Tasks 1-6 for independent progression and debugging. A whiteboard/projector (to show videos Task 1-6 and for the teacher demonstration of the Scratch application)*

*Vocabulary-User Interface, reuse code; drag and drop; Sprite List, Stage, Script Area, Shrink Tool, Crosshair, Duplicate Tool, Thumbnail, Motion Palette-move 10 steps, go to x: y, point in the direction 90, set rotation style. Looks Palette-switch costume to; Event Palette-key space pressed, when green flag clicked, broadcast message, when I receive Level2; Control Palette wait, forever, stop all, if ....then; Sensing Palette-if touching ....., f touching colour; Data Palette make a Variable selection statements, set score to 0, change score by .....,Sound Palette- play sound until done, play sound.*

**Lesson Objective-To complete the Pacman Game**

**Starter** - Navigate to your named pupil folder on the school network. Open Y5L4 Pacman4 Demo Debug T1-6.sb2 file found inside Y5L4 Pacman4 S2-0 Folder. This Scratch file will show the objectives (Tasks1-6) for the lesson and will be used to help you debug your own Scratch project.

	<p><b>T1.</b> Open <b>Y5L4 Pacman4 Start.sb2</b> and save with your initials. Maximise the screen.</p> <p>At the moment only the apple sprite appears on all 3 levels. When Pacman <b>broadcasts Level2</b>, the stage backdrop changes to <b>Level2</b> and the apple <b>receives</b> (hears) the message <b>Level2</b>. It then <b>shows</b> (appears) on <b>Level2</b>.</p> <p>When Pacman <b>broadcasts Level3</b>, the stage changes to Level3 and the apple <b>shows</b> (appears) on Level3 on the stage.</p> <p>We need to copy the <b>Level2</b> stack and the <b>Level3</b> stack to the other sprites.</p> <p>Select the Apple thumbnail, drag the <b>Level2</b> stack and the <b>Level3</b> stack to all the other sprites' thumbnails. Click each thumbnail to ensure all the code has copied across. The stacks will be on top of each other so you will have to drag the stacks down the Script Area.</p>
<p>Level 3</p> 	<p><b>T2.</b> You may need to change the position of some of the sprites on the different levels as they are <b>on top</b> of the maze. Click the <b>Stage</b> thumbnail, select <b>Backdrop Level2</b>. You should be able to see that all the sprites are on the green area of the maze.</p> <p>Select <b>Backdrop Level3</b>. The banana is not on the green part of the maze. Pacman will not be able to eat the bananas on Level3.</p> <p>Select the <b>Banana Thumbnail</b>. Select the <b>Script Tab</b>. From the <b>Motion Palette</b>, drag out a <b>go to x: y:</b> The coordinates show the <b>position</b> of the bananas. Slot the <b>go to x: y: block</b> underneath the <b>show</b> block in the first stack. Make sure it is the one that starts with <b>when green flag clicked</b>.</p> <p>Move the banana one square to the right of its original position. From the <b>Motion Palette</b>, drag out a <b>go to x: y:</b> The coordinates show the position of the bananas. Slot the <b>go to x: y: block</b> underneath the <b>show</b> block in the <b>when I receive Level3</b> stack.</p>

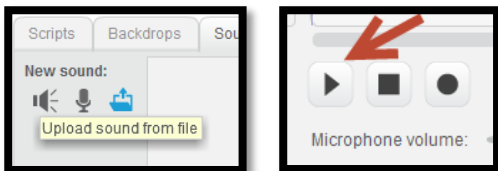


**T3.** On Level3 the cake sprite is also in the wrong position. From the **Motion Palette**, drag out a **go to x: y:** The coordinates show the position of the cake. Slot the **go to x: y: block** underneath the **show block** in the first stack. Make sure it is the one that start with **when green flag clicked**.

Move the cake one square to the right on the original position.

Select the **Script Tab**. From the **Motion Palette**, drag out a **go to x: y: The** coordinates show the position of the cake. Slot the **go to x: y: block** underneath the **show block** of the stack starting **when I receive Level3**

Remember your coordinates will be slightly different to mine. Move the melon off the red square, using the same method as above.



**T4.** Add Sound to play throughout the game Select the **Stage thumbnail**. Select the **Sound Tab**. Select **upload sound from file**. Select **Pacman Intro**. Test the sound by clicking the play button.

Select the **Scripts Tab**.

From the **Event Palette**, drag out a **when green flag is clicked**.

From the **Control Palette** drag out a **forever loop**. From the **Sounds Palette** drag out a **play sound until done**. The Pacman sound will now play throughout the game.

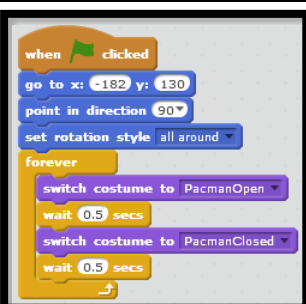


**T5.** Add a crashing sound as Pacman moves to the next level.

Select the **Pacman Thumbnail**. Select the **Sounds Tab**. Select **sound from library**. Choose **cymbal crash**.

Select the drop down arrow next to **Effects** and select **louder**. When Pacman touches the red square the sound effect will be louder than the background music.

Select the **Script Tab**. From the **Sounds Palette**, drag out a **play sound cymbal crash** and slot inside the **if then loop** of all 3 levels.



**T6.** We want Pacman to start facing to the right of the maze. In addition we want him to rotate all around the maze. Select the **Pacman Thumbnail**.

From the **Motion Palette**, drag out a **point in direction 90** (Pacman will now face towards the right of the maze). From the **Motion Palette**, drag out a **set rotation style all around**.

Select **Save**, your Pacman game is now finished. **ENJOY!**