

Name:

Date:

Year 4 Catch the Apples Lesson 1

Resources - Scratch 2 application, pencil, Y4L1 PR Folder, Y4L1 Pupil Workbook (hardcopy if desired), Y4L1 TR Folder, Whiteboard/projector (to show video and demonstrate the Scratch application)

Vocabulary-User Interface, Sprite List, Stage, Script Area, Motion Blocks-move 10 steps, go to x: y: , Control Block-when green flag clicked, key space pressed, forever, stop all, Sensing Block-key spaced pressed,

Lesson Objectives -

- Target-To create sprites and backgrounds from picture images



Start Scratch 2 offline or online- Navigate to your pupil folder.

Open Y4L1 Catch the Apples Demo

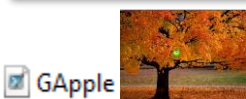
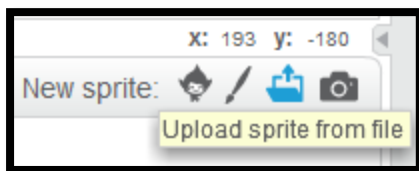
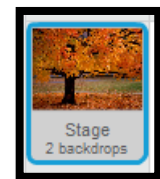
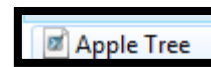
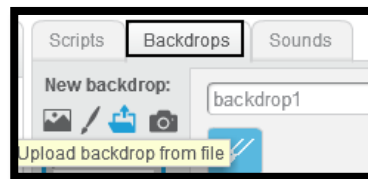
Play the demo and try to catch the apples in the cart. Each time you catch an apple you score 1 point. You only have 35 seconds to score 30 points

T1. You can create sprites and backgrounds from any picture. Inside your pupil folder are 3 images (png files) that you are going to import into your Scratch project.
Start Scratch →File→ Save As→ Navigate to your Named Folder →Y4L1 Pupil Folder →Name the file "Y4L1 Apples+Initials" If you are working with a partner put both your initials.



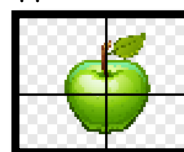
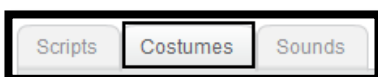
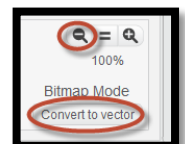
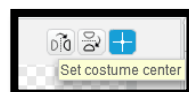
T2. Right click on the cat sprite on the stage and select delete.

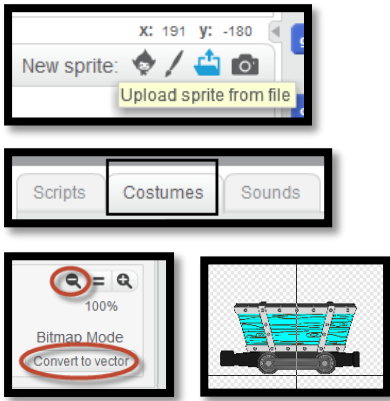
Select the Stage → Select the Background Tab
Select upload backdrop from file →Navigate to Your Named Folder →Y4L1 Pupil Folder → Select the Apple Tree image, click OK



T3. Select upload sprite from file
Navigate to → Y4L1 Pupil Folder → Select the GApple image, click OK. The apple appears on the stage. Select the GApple thumbnail. Select the Costume Tab. Select the minus zoom then convert to vector.

Select costume center. Make sure the lines go through the exact centre of the apple.





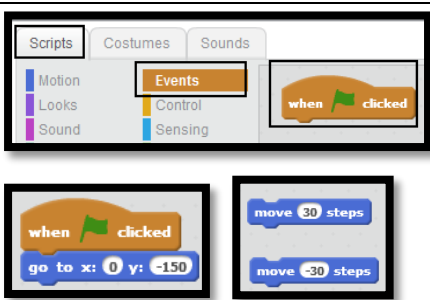
T4. Insert a Cart sprite.

Navigate to Your Named Folder → Y4L1 Pupil Folder → Select the Cart image, click OK. A very large image appears on screen. Select the costume tab. We are going to convert the bitmap image to a vector image as it will shrink with a better image quality.

Select the zoom - button to change the image to 100%
Select Convert to vector.

Select the cart in the Paint Editor. Using the corner make the image smaller to approx. 130 x 68

Drag the crosshair just underneath the wheels of the truck (x axis) and the y axis in the centre of the truck. Click OK.



T5. Select the Scripts tab. Drag a **when green flag clicked** from the **Events Palette** into the script area. Select the **Motion** tab and drag a **go to x 0 y -150**. Click on the numbers to change them. Drag out 2 **move 10 steps** and change the numbers as shown. **-30** will make the cart go left 30 steps along the x axis and **30** will make the cart go right 30 steps.



T6 Drag out a **forever loop** and also 2 **if then blocks** from the **Control Palette**.

Snap the blocks together as shown.

From the **Sensing Palate**. Drag 2 **key space pressed** blocks onto the script area. Change to **key right arrow pressed**. Change to **key left arrow pressed**



Slot the **key right arrow pressed** into the 'if then block'. Slot the **key left arrow pressed** into the 'if then block'

Select the **Save** button. Your project should have been saved with your initials at the beginning of the lesson.

"Y4L1 Apples+Initials" If you are worried you have not saved the files, just select save as and save it again.

Test your work and debug

End of Lesson Y4L1

