

Computer Science Education Week 2018

Draw a Song

Did you know that Root can see colors?
Use Wheel Speeds, When Color and Music Blocks to draw a song for Root to sing!

Directions:



1. Open the Root Coding App and connect to your Root.



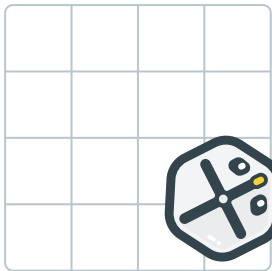
2. Drag out a green **Wheel Speeds Block** and attach it to the **When Play Block**. The **Wheel Speeds Block** turns Root's wheels on forever until you stop your program.



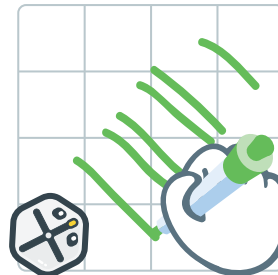
3. Drag out a **When Color Block**. The **When Color Block** tells Root what to do when it drives over a color.



4. Attach a **Music Block** to the **When Color Block**. This code tells Root to play the note C when it drives over the color green.



5. Next, grab your Root, fold-out whiteboard grid and a green dry-erase marker.



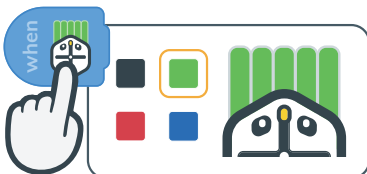
6. Draw green lines on the whiteboard grid for Root to drive over.



7. Press Play to watch Root drive over the green lines and play music. Is your song very fast or slow? Does Root see a lot of green lines or only a few?

Going Further:

Add more **When Color Blocks** and edit them to code Root to play different notes when it sees Red, Blue and Black.



Then press Play to watch Root drive over your colored lines and play your song. Try changing your lines to make your song better!

