

matata  
studio

# FUN Coding Manual

for Musician Add-on + Coding Set





## Lesson 1

# Staff Notes and Pitches



## **Overview and Introduction**

Where do you hear music? What types of music (genre) do you like? How do we write music? Orchestras, choirs and bands use sheet music to play the music we hear. Today we will identify the musical staff and identify high and low pitches.

### **Learning Objectives**

- Identify the five lines and four spaces that create the staff.
- Identify higher and lower pitches on the staff.

### **Standards**

K-2: MU:Cr1. 1.Ka, MU:Cr1. 1.1a, MU:Cr1. 1.2a  
3-5: MU:Cr1. 1.3a, MU:Cr1. 1.4a, MU:Cr1. 1.5a

### **Time**

60 minutes

### **Materials**

- Staff Notes and Worksheets
- Pencils
- MatataStudio Coding Set
  - Command Tower
  - Control Board
  - MatataBot
  - MatataStudio Music Blocks

### **Teacher Set-Up and Preparation**

- Copy "The Staff, Notes and Pitches" worksheet
- MatataStudio Music Coding Set pieces
- Charge MatataStudio Command Tower and MatataBot

## Activity

Students will identify note location and pitch name on the musical treble staff. Students will create and identify high and low pitches.

- Distribute "The Staff, Notes and Pitches" worksheet.
- Students will read and identify the five lines and four spaces that create the staff.
- Use one Matatalab music block and turn the dial to "1" and place on the Control Board. Press the play button.
- Dial 1-7 and play each pitch on the Control Board and inform the students that the notes are the first seven pitches of a major scale.
- Use two music Matatalab blocks. Dial one block to number "3"; dial one block to number "5". Students will identify which block is higher and lower in pitch.

## Students will

- Students will identify high and low pitches on the staff.
- Students will complete exercises 1, 2, 3 and 4.
- Students will be given one Matatalab Block and form pairs. Students will turn block dials and identify who has the higher and lower sound by placing their block on the Control Board.

## Closing

## Assessment

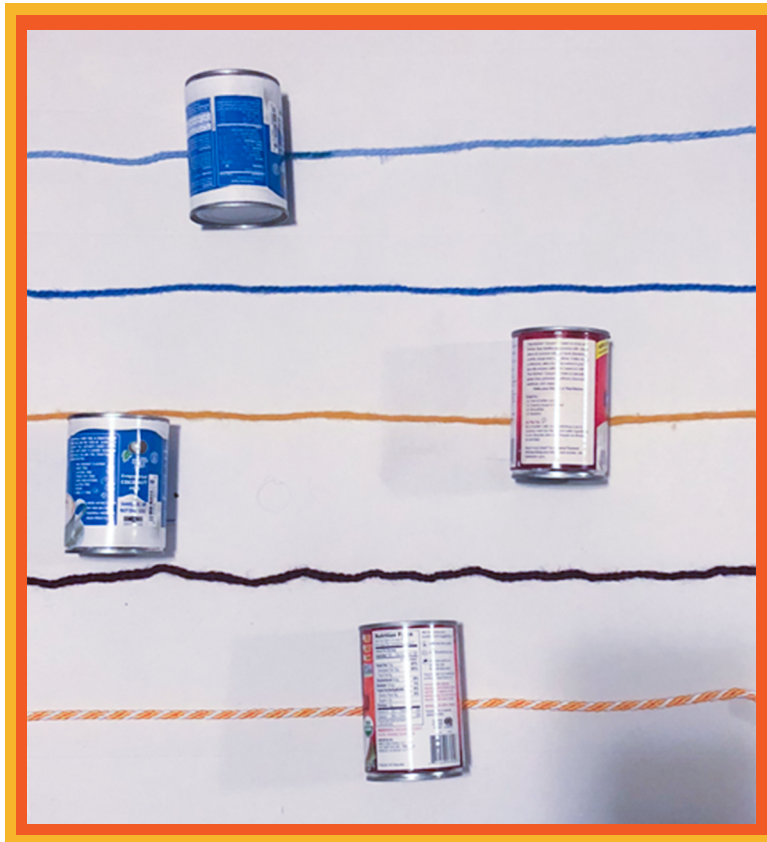
**We have identified and compared high and low pitches and how they look on the staff.**

Have the students answer the following questions:

- How many lines are on a staff?
- How many spaces are on a staff?
- How many notes are on a major scale?

## Extensions

Music staves are located on paper. How can we create and construct a music staff using other materials? One idea would be to use five different colors of yarn. The notes could be items in your house like cans, cups, etc. These items can be placed on the staff.



We all like different types of music. Create a music game that involves recordings of male and female vocalists singing the same song and determine the comparison and differences in high and low sounds. Your audience can vote on the best vocalist.

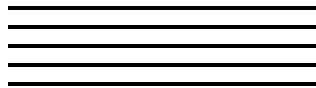
## Real World Connections

Music can be viewed and heard. How would someone write music without playing an instrument? How long will it take someone to learn how to read music? Is music on the staff written the same as music in other countries?

Have you ever played an instrument? How many instruments can a person learn proficiently?

# The Staff, Notes and Pitches

Music is written on a STAFF of five lines and the four spaces between.

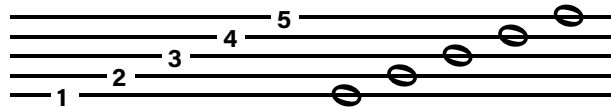


The STAFF

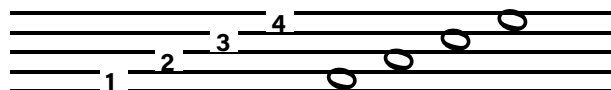
Music NOTES are oval-shaped symbols that are placed on the lines and in the spaces. They represent musical sounds, called PITCHES.



The lines of the staff are numbered from bottom to top.

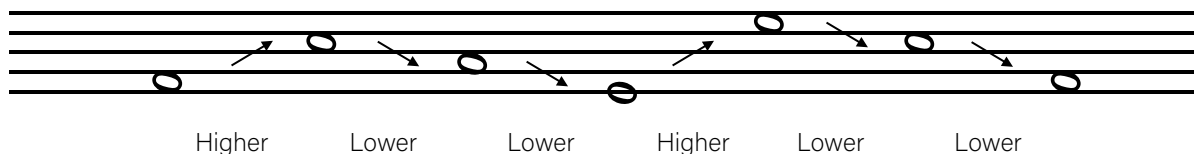


The spaces between the lines are also numbered from bottom top.



If the notes appear higher on the staff, they sound higher in pitch.

If the notes appear lower on the staff, they lower in pitch.

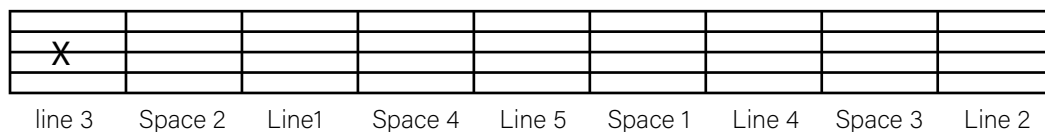



## Exercises

- 1 Draw a staff by connecting the dots  
Use a ruler or straight edge Number the lines, then the spaces from low to high



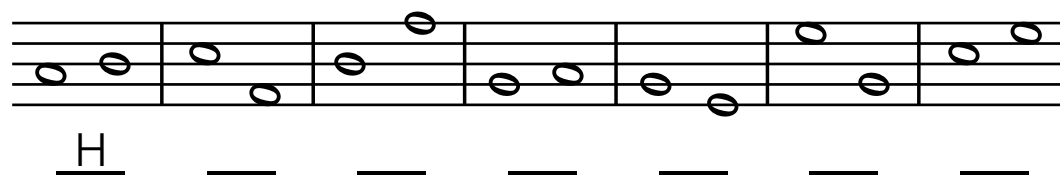
- 2 On the staff, mark an **X** in the following locations:



- 3 Write notes like this  on the following lines and spaces:

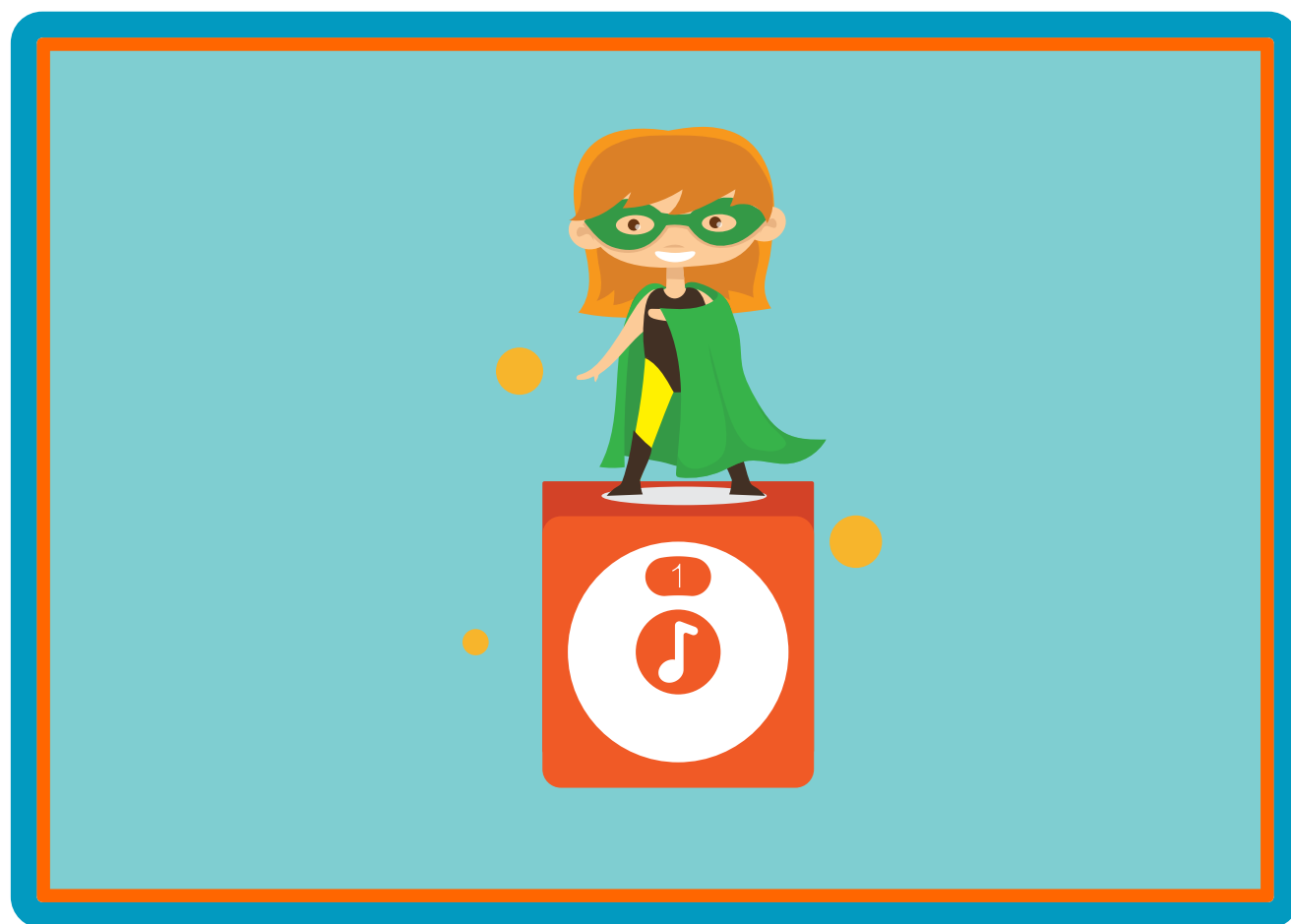


- 4 Indicate whether the 2nd note is higher or lower than the 1st note by using an H (higher) or L (lower)



## Lesson 2

# Staff Note Names



## **Overview and Introduction**

Just like reading a book, music has a language. The language of music is placed on a staff. These are called notes and each note on the staff has a letter name. Some notes are also identified above and below the staff. In this lesson you will identify note names on the staff.

### **Learning Objectives**

- » Review the five lines and four spaces that create the staff.
- » Identify the treble clef line and space note names.

### **Standards**

K-2: MU:Cr1. 1.Ka, MU:Cr1. 1.1a, MU:Cr1. 1.2a.  
3-5: MU:Cr1. 1.3a, MU:Cr1. 1.4a, MU:Cr1. 1.5a

### **Time**

60 minutes

### **Materials**

- » Staff Notes and Worksheets
- » Pencils
- » MatataStudio Coding Set
  - » Command Tower
  - » Control Board
  - » MatataBot
  - » MatataStudio Music Blocks

### **Teacher Set-Up and Preparation**

- » Copy “Treble Clef and Staff” worksheet
- » Staff paper
- » MatataStudio Music Coding Set pieces
- » Charge MatataStudio Command Tower and MatataBot

## Activity

- Distribute "Treble Clef and Staff" worksheet.
- Students will review the five lines and four spaces that create the staff.
- Students will identify the treble clef line note names and identify the phrases that work to help identify the names of the notes on the staff (**Every Good Boy Does Fine** and **FACE**)
- Identify the line notes E, G, B, D, F and the line the note is located on the staff (**E** 1st line, **G** 2nd line, etc.)
- Identify the space notes F, A, C, E and the space the note is located on the staff (**F** 1st space, **A** 2nd space, etc.)
- Use one MatataStudio music block on the Control Board and turn the dial to "3" and press the play button.
- The sound that is heard is the note "**E**" on the 1st line of the staff.
- Use two music MatataStudio blocks. Dial one block to number "3"; dial one block to number "4". Students will identify which block is "**E**" on the line and "**F**" on the space.

## Students will

- Students will complete exercises 1, 2, and 3.
- Students will be given MatataStudio music blocks and form pairs. Students will use the staff paper and draw the notes on the lines and spaces and create and write their own phrases to identify the notes.  
Example: Lined notes: **Every Good Burger Deserves Fries**; Space Notes: **Find And Cook Eggs**.

## Closing

## Assessment

We have identified the letter names for notes on the treble clef staff.

Have the students answer the following questions:

- What are the letter line names for notes on the lines?
- What are the letter line names for notes on the spaces?
- What type of pitch is located in the Treble Clef?
- How many letters are used to identify music notes?

## Extensions

Create a template to identify notes on the lines and spaces by color. Are notes limited to the staff or should other colors be used to show notes above and below the staff?

### Template

E F G D F

F A C E

● Lines  
● Spaces

You may want to create a staff that is designed like your favorite food. How would you identify the notes in the lines and spaces?

## Real World Connections

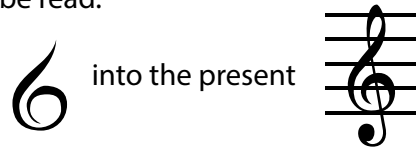
Have you ever been to an orchestra or performance? Did the musicians use music? Did everyone play the same thing? Did different musicians play different parts? Were the musicians limited to 9 notes? How do you think the music is created for an orchestra or band?

# Treble Clef and Staff

Music notes are named after the first seven letters of the alphabet, from A to G. By their position on the staff, they can represent the entire range of musical sound.

CLEF signs help to organize the staff so notes can easily be read.

The TREBLE CLEF is used for notes in the higher pitch ranges. The treble (or G) clef has evolved from a stylized letter G:

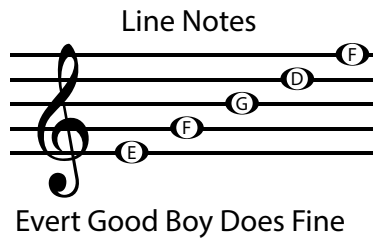


The curl of the treble clef circles the line on which the note G is placed. This G is above MIDDLE C (the C nearest the middle of the keyboard).

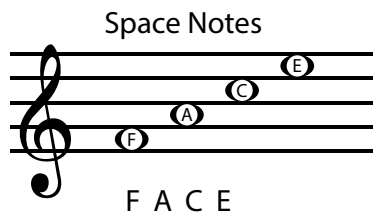
The TREBLE STAFF



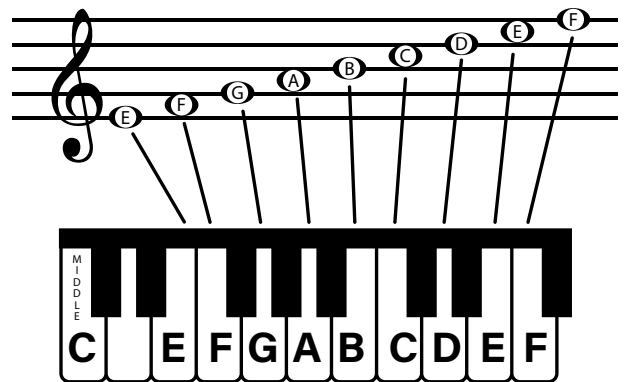
In the treble staff, the names of the notes on the lines from bottom to top are E, G, B, D, F.



The names of the notes in the spaces from bottom to top spell FACE.

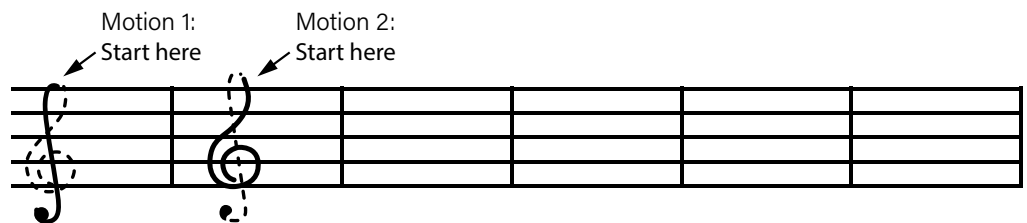


All the notes of the TREBLE STAFF:



## Exercises

- 1 The treble clef is written in two motions. Trace along the dotted lines as indicated then draw four more



- 2 Write the letter names of the following notes. Use capital letters.



- 3 Write the notes on the staff indicated by the letters. If the notes can be written in two places, write one above the other.

