

## Lesson 1.2 - Compose a Song

### Overview

During this lesson, students will gain understanding of music therapy and that music is composed of notes. Students will integrate and exhibit learning by performing a song which uses the Do-Re-Mi scale.

### Key Information

**Level 1:** (Ages 8-9) US Grades 2 or 3

Time: 45/90 minutes

<a href="#">Warm-Up</a>	5 minutes
<a href="#">Mini-lesson</a>	10 minutes
<a href="#">Worked Example</a>	7 minutes
<a href="#">Challenge 1</a>	7 minutes
<a href="#">Challenge 1 - Play it!</a>	5 minutes
<a href="#">Challenge 2</a>	7 minutes
<a href="#">Tidy Up / Exit Ticket</a>	4 minutes

### Lesson Topics

- **Computing**
  - Inputs, outputs, composition, decomposition, debugging
- **English Language Arts**
  - Use information gained from illustrations and the words in a text to demonstrate understanding of the text
  - Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area
- **Scientific Thinking**
  - Asking relevant questions and using different types of scientific enquiries to answer them
- **Music**
  - Create rhythmic and melodic patterns for a specific purpose, including:
    - Playing a song
    - Playing a musical instrument
    - Musical notation (sol - fa)

### Learning Objectives

- **As a result of this lesson, students will be able to:**
  - Explain that music is composed of notes
  - Identify the names of notes using the sol-fa notation
  - Play a simple melody
  - Make a musical instrument using SAM blocks

### Materials

- Sheet music for Twinkle, Twinkle Little Star (optional)
- SAM Labs Kit
- SAM Labs Student Workbook

### Warm Up – Do you remember this song?

5 minutes

*What memories do you associate with music?*

**Objective:** Conduct scientific inquiry about the link between music and memory.

**Procedures:** The teacher plays a few popular songs for students and asks, ‘*what memory do you associate with this song?*’. Students are asked to write about a memory which they associate with that particular song. Student share their favorite memory with a partner or small group. The teacher illustrates some examples to support students to consider the richness of the memories associated with music.

#### Sample song ideas

Happy Birthday (free download)

<http://www.beatdreamer.com/happy-birthday-song.html#player1?catid=0&trackid=0>

Twinkle, Twinkle Little Star (free download)

<http://freekidsmusic.com/traditional-childrens-songs/twinkle-twinkle-little-star/>

Where you are (Moana soundtrack)

<https://www.emp3m.co/mp3/moana-soundtrack.html>

**Link forward:** The teacher introduces the idea that melody of a song helps us to remember it.

### Mini-lesson

10 minutes

*How is music used to help people?*

**Objective:** Students explore how music therapy improves people’s lives

**Procedures:** The teacher asks students if they were aware that music is now being used as a form of therapy to help dementia patients remember things.

The teacher may choose to play this [clip](#) to show an example of a patient benefitting from music therapy or may wish to use the clip for their own background knowledge.



The teacher then elicits or explains that music is composed of notes. S/he also explains that music can evoke emotions. We can associate good or bad memories with happy or sad songs.

One of the most popular scales in music is the solfège major scale of ‘C’. There are 8 notes which comprise the scale (Do, Re, Mi, Fa, Sol, La, Ti, Do.) The teacher conveys the idea that individual sounds are notes, groups of sounds are chords and melodies are a combination of pitches and rhythms. All of these things comprise songs.

At the end of the mini-lesson, students match or define keywords in their workbooks (2 minutes).

## Lesson 1.2 - Compose a Song

### Key Words

- Notes
- Chord
- Music therapy
- Melody
- Sol
- Mi

**Let's Discuss:** How else does music help people (beyond music therapy)? In your workbook or with a partner, record, discuss, or share your favorite song and what memory you associate with it.

**Link forward:** Teacher links to the practical portion of the lesson whereby students compose a song (Twinkle, Twinkle, Little Star) that can be used in a (mock) musical therapy session.

### Worked Example

7 minutes

Make a system that plays three notes

Instructions	Workspace	Notes for Teachers
<p><b>Step 1.</b> Drag three Key Press blocks onto the Workspace.</p>	<p>Key Press</p>	<p>Teacher says, "The Key Presses will act as keys of a 'piano' in our system"</p>
<p><b>Step 2.</b> Drag 3 Sound Player blocks onto the Workspace.</p>	<p>Sound Player</p>	<p>Teacher says, "Each Sound Player should connect to an individual Key Press."</p> <p>Students can complete this action more quickly by copy/pasting the system 2 additional times.</p>
<p><b>Step 3.</b> Connect each Sound block to a Key Press block.</p>		<p>Teacher says, "Each Sound Player block will be programmed to play a different note on our piano."</p>
<p><b>Step 4.</b> Notice that Key Press has a dot above it, we will use these later as 'keys' to play the notes.</p>		<p>(If using a computer) utilise 'Q', 'W' and 'E' as this will mimic a keyboard - notes in a line are easier for students to play.</p>
<p><b>Step 5.</b> Open the Settings icon of the first (leftmost) Sound Player and choose 'Notes' and 'Do'.</p>		<p>We are using 'absolute' sol - fa here where 'Do' = C. This is less confusing for students than 'moveable sol-fa' where 'Do' is always the tonic or base note of the scale, irrespective of the key.</p>
<p><b>Step 6.</b> Repeat that step with the remaining 2 Sound Player blocks, choosing 'Re' and 'Mi'.</p>		<p>Here we are adding D and C, thus giving students the first three notes of the Major scale.</p>

## Lesson 1.2 - Compose a Song

<p><b>Step 7.</b> Have a play with your three notes!</p>		<p>Allow students to play for a little time. Do they notice that they can play chords? (two notes simultaneously)</p>
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### Challenge 1

7 minutes

Make a keyboard instrument

Instructions	Workspace	Notes for Teachers
<p><b>Step 1.</b> Repeat steps 1 - 4 with 5 more Key Press and Sound Player blocks.</p>		<p>We recommend arranging the blocks horizontally</p> <p>Students can complete this action more quickly by copy/pasting the system 2 additional times.</p> <p>The correct order for the Notes is: do, re, mi, fa, sol, la ,ti, do +1</p>
<p><b>Step 2.</b> Set the final Player to 'Do + 1'.</p>		<p>Students may find it confusing that there are two 'Do's'. They may be able to recognise that two notes (Do and Do + 1) are 'the same'</p>
<p><b>Step 3.</b> Play each key to make sure you have the notes in the right order</p>		<p>We recommend placing the Key Press blocks in a line on the screen. This will make the final instrument easier to play.</p> <p>(If using a computer) We have used 'Q', 'W' and 'E' because on most keyboards, these notes are together in a line, thus making them easier to play. We also recommend using the letters that are together in a line on the keyboard. This will make the final instrument easier to play</p>

**Checks for understanding:** What's the difference between a note and a chord? What is a melody?

### Challenge 1 - Play it!

5 minutes

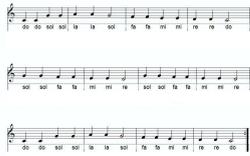
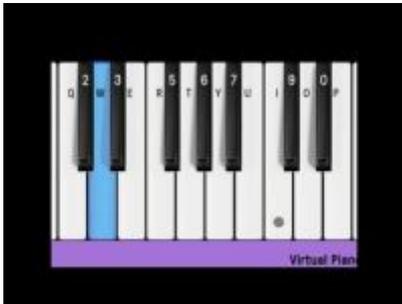
Can you play a melody?

Instructions	Workspace	Notes for Teachers
<p><b>Step 1.</b> Let's play some songs. Here is one: do, do, sol, sol, la, la, so_, fa, fa, mi, mi, re, re, do_</p>	<p>do, do, sol, sol, la, la, so_, fa, fa, mi, mi, re, re, do_</p>	<p>The Teacher says, "Can you remember the order of notes? Refer to your student workbook if you need to. The '_' means the note should be played for a bit longer."</p> <p>"Do you recognize this song?" (The Song is Twinkle, Twinkle, Little Star.)</p>

## Challenge 2

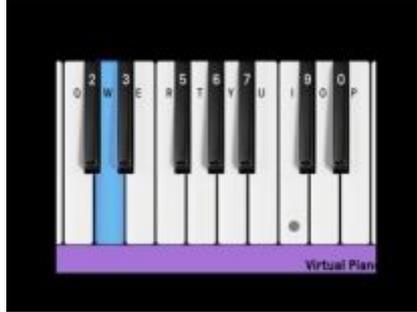
7 minutes

Perform your song!

Instructions	Workspace	Notes for Teachers
<p><b>Step 1.</b> Practice performing your song.</p>	 <p>Do, do, sol, sol, la, la, sol_            Fa, fa, mi, mi, re, re, do_            Sol, sol, fa, fa, mi, mi, re_            Sol, sol, fa, fa, mi, mi, re_            Do, do, sol, sol, la, la, sol_            Fa, fa, mi, mi, re, re, do_</p>	<p>Teacher says, "Can you remember the entire song?" Encourage them by trial and error, playing using the instrument they have built</p> <p>(If using a tablet) Students will not have recourse to using the letters on the keyboard and will need your help or have to use sol-fa notation available. Encourage students to notice that some notes are of different lengths</p> <p>(If using a computer) the letters we have assigned are the top row of the keyboard</p> <p>Q, Q, T, T, Y, Y, T_,            R, R, E, E, W, W, Q            T, T, R, R, E, E, W_            T, T, R, R, E, E, W_            Q, Q, T, T, Y, Y, T_,            R, R, E, E, W, W, Q</p>
<p><b>Step 2.</b> Can you identify the notes (Do-Ti) on a real sheet of music?</p>		<p>It's important to encourage students to recognise the names of the notes and to use them, but use your discretion based on students' prior knowledge of musical notation.</p>
<p><b>Step 3.</b> Perform the song for the rest of the class/small group.</p>		<p>Perform with a musical instrument.</p> <p>An alternative way to perform this song would be for small groups to be assigned different notes/portions of the song. The song is then played collaboratively in a round.</p>
<p><b>Extension Ideas:</b></p> <ul style="list-style-type: none"> <li>● Compose another song, eg.             <ul style="list-style-type: none"> <li>○ <i>We wish you a merry Christmas:</i></li> <li>○ If students are <b>new</b> to sol_fa: do, fa, fa, sol, fa, mi, re, re, re, sol, sol, la, sol, fa, mi, mi,</li> <li>○ If students <b>know</b> sol-fa they will realise that 'do' is 'F' in this song, and therefore a more correct notation is: sol, do, do, re, do, ti, la, la, la, re, re, mi, re, do, ti, ti</li> <li>○ (If using a computer) Q, R, R, T, R, E, W, W, W, T, T, Y, T,R, E, Q</li> </ul> </li> </ul> 		

## Lesson 1.2 - Compose a Song

- *Baa baa black sheep:*
- Do, do, sol, sol, la, si do, la, sol, fa, fa, mi, mi, re, re, do
- *((If using a computer) Q, Q, T, T, Y, U, I, Y, T\_R, R, E, E, W, W, Q*



**Checks for understanding:** *What is the complete scale? Which are the inputs/outputs in your system (song)?*

### Tidy Up / Exit Ticket

**4 minutes**

*Reinforcing the learning objectives of the lesson, students can reflect on key takeaways by completing and submitting an exit ticket.*