

MIDI INSTRUMENT SURVEY PROJECT

STUDENT'S GUIDE

CLASS TIME:

NAME:

PERIOD:

TEACHER:

CLASS:

REQUIRED MATERIALS:

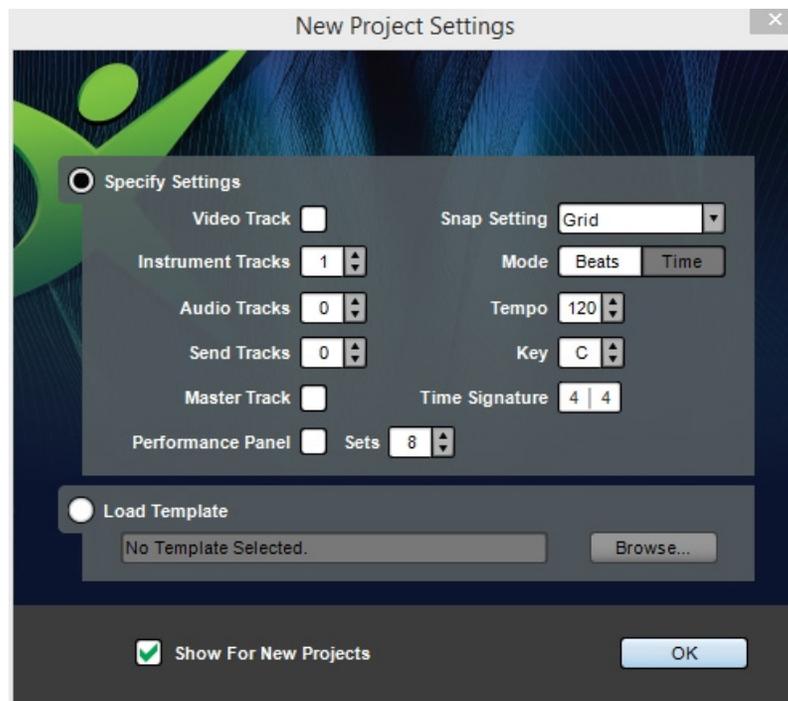
- Computer with Mixcraft
- Headphones or Monitors
- MIDI Versions of Children's Songs [Additional Material Download Area]
- Copies of the MIDI Instrument Survey Student Guide [Additional Material Download]

SUGGESTED MATERIALS:

- MIDI keyboard
- Sheet Music to Transcribe [For Older Students]
- Further Reading Materials

ACTIVITY

1. Before starting the lesson, ask your teacher if you will be using MIDI files from the "Additional Materials Download" or whether you will be composing/transcribing your own.
2. To begin the lesson, open Mixcraft and use the New Project window to load a template with one virtual instrument track.



Once the New Project window has loaded, remove any audio tracks, and set the instrument-tracks field to one.

3. Importing MIDI files. If you are importing a MIDI file from the "Additional Materials Download" into Mixcraft, simply drag and drop the file onto Mixcraft's Timeline or onto the virtual instrument track. A Mixcraft prompt window will give you the option to change the master tempo to the tempo in the MIDI file. Select "Yes" for now.



Users will be prompted with the option to change the master tempo. Select “Yes” for now.

- A MIDI region of the song will appear on a virtual instrument track. Lines on the region refer to note duration and pitch: higher lines on a vertical axis have higher pitch while longer notes on the horizontal axis represent duration.



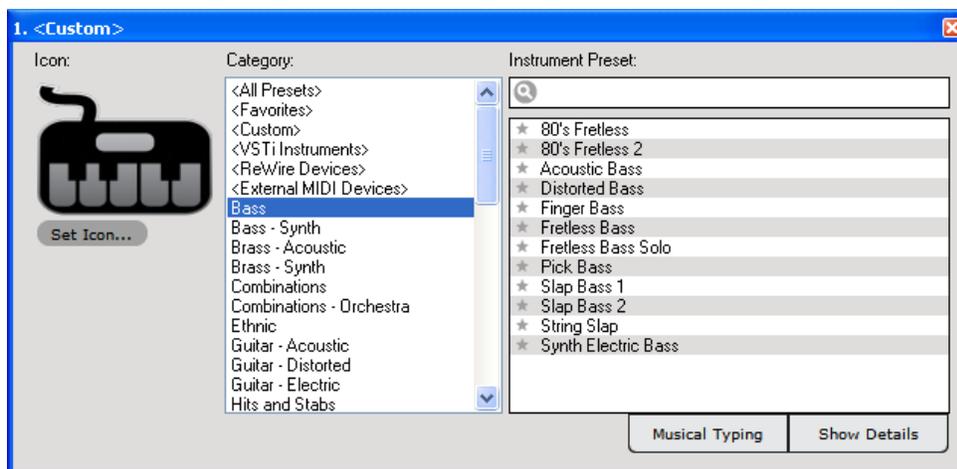
A MIDI representation of “Eency Weency Spider.”

- Before playing back the newly imported song, assign a virtual instrument to the virtual instrument track. Click the “keyboard” icon on the virtual instrument track. A new window will appear.



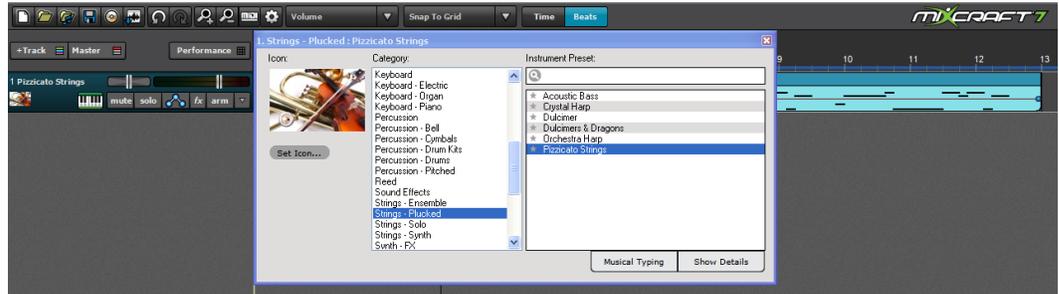
Click the keyboard icon on the virtual instrument track to assign virtual instruments.

- Select your instrument. Browse Mixcraft’s virtual instruments by instrumental category. Brass, guitar, wind, and keyboard sounds are readily available – simply double-click on a sound to assign it to the virtual instrument track.



Browse through a variety of virtual instruments in this window.

7. Play back your melody. Press the master play button or hit space bar to listen to the melody. Notice how the selected virtual instrument is now “playing” the song.
8. Experiment with different instruments. Ask your teacher whether he or she has a specific lesson plan for you at this point. If she does not, experiment with different virtual instruments:
 - Try loading a string instrument, such as a violin.
 - Try loading a brass instrument, such as a trumpet.
 - Try loading a synthesized sound, such as a lead patch.



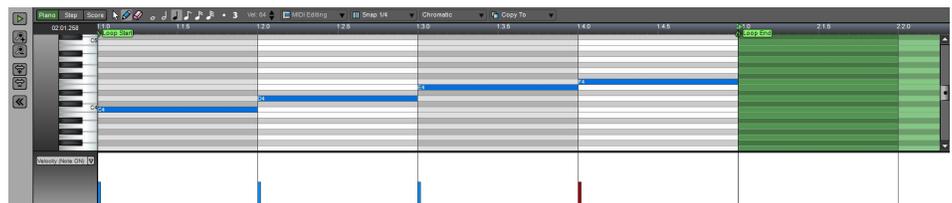
Assigning a pizzicato string sound to the Eency Weency Spider melody.

9. Composing with MIDI and the Piano Roll. Try composing an original melody or transcribing sheet music into MIDI format by using Mixcraft's Piano Roll:
 - A) First, create a new virtual instrument track by selecting one from the menu: Track > Add Track > Add Virtual Instrument track.
 - B) Double click on the Timeline area that corresponds to the new virtual instrument track. A blank MIDI region should appear and the Piano Roll window should expand from the bottom of the screen.
 - C) Select the Pencil tool in the Piano Roll and “draw” MIDI notes onto the Piano Roll. Notes drawn on the Piano Roll will then appear in the MIDI region on the Timeline as well.



The Piano Roll Toolbar consists of the pointer arrow, the pencil tool, and the eraser tool.

- D) Listen closely as you draw a few notes. Try to create an ascending melody like the example below:



A sample melody in C Major programmed using Mixcraft's Pencil tool and the Piano Roll.

- E)** When you have finished your melody, tidy up the MIDI notes by quantizing them. Quantizing locks each MIDI note to the Piano Roll grid and can also be used to control the duration of each note. To do this, select “Quantize” from the MIDI Editing menu at the top of the Piano Roll window. In the example above, the notes were quantized to an “8th note” with the “note endings” option selected.

Example settings in the “Quantize” window.

- 10.** Save the MIDI melodies. Save your MIDI melody (-ies). Simply select the MIDI regions and go to File > Save as MIDI file ... These files will now be stored on the computer hard drive and can then be exported, imported by different computers or used in new Mixcraft sessions.