From Beetles to Beatles

Written By: Stephanie Shaner
County: Santa Rosa
Subject: Music
Grade(s): 2nd/3rd
Instructional Time: 6 sessions
Suggested or Required Technology: iPad, Garage Band app (or comparable), Levon Biss website (microsculpture.net), kid friendly music of the Beatles, Chrome Music Lab site, Beat Bugs on YouTube, Beat Bugs app, Quaver Music Interactives

BRIEF DESCRIPTION

Students will explore the beautiful macro photography/microsculpture of insects, created by Levon Biss. Students will use multiple means of expression within the fine arts, as they learn more about these beautiful beetles and butterflies. Students will use an iPad, Garage Band app, and music of the Beatles to draw, move, act, sing, and create music in this course of study. All students will find their most comfortable way of expressing their new knowledge of beetles, both individually and as a group.

Please note: the test class for this curriculum was switched from live, in-class instruction to virtual instruction due to the coronavirus outbreak. We have included the planned lessons below as well as PowerPoint slides of how the lessons actually happened virtually.

STANDARDS

MU.2.C.1.2
Respond to a piece of music and discuss individual interpretations.

MU.2.S.1.1
Improvise short phrases in response to a given musical question.

MU.2.F.3.1
Collaborate with others in a music presentation and discuss what was successful and what could be improved.

MU.3.C.1.2
Respond to a musical work in a variety of ways and compare individual interpretations.

MU.3.F.1.1
Enhance the meaning of a story or poem by creating a musical interpretation using voices, instruments, movement, and/or found sounds.
DA.2.F.1.1
Create dances that interpret animals and storybook or other imagined characters.

DA.2.F.3.1
Follow directions given by the teacher or peers, and work successfully in small-group, cooperative settings.

SC.3.N.1.3
Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.

TH.3.F.3.1
Participate in a collaborative project to create a theatrical performance and reflect on the experience.

LEARNING OBJECTIVES
Students will:
• Understand that macro photography/microsculpture takes very small objects and magnifies them to show the most amazing color and detail for study and enjoyment.
• Understand that the arts can be used to study and celebrate science and discovery.
• Understand that putting individual parts together, whether in photography or in a performance setting, can enhance the whole group effort.
• Understand that technology can make large undertakings more accessible and manageable.

GUIDING QUESTIONS

• Which beetle is your favorite?
• What are 3 facts that you learned about your favorite beetle?
• Which was your favorite form of expression in studying the beetles, music, art, dance or drama?
• Which form of expression pushed you the most in your ability to express yourself?
• If you could magnify a favorite object from your personal life, what would you choose? Why?

PRIOR KNOWLEDGE NEEDED

• Photos can be zoomed in or magnified for detail.
• Museums display many kinds of artwork, including photography.
• Personal interests drive our choices in hobbies, as well as possible future careers.
FORMATIVE ASSESSMENT

Students will complete various parts of the project over six sessions or class meetings. Each class meeting will have a rubric for the daily activity, based on levels 4 (highest) through 1 (lowest), observational notes and student feedback.

SUMMATIVE ASSESSMENT

Students will participate in a performance for their grade level and their parents. Students will have the opportunity to demonstrate their knowledge of beetles through their artwork, movement, drama and music.
# LESSONS

## SESSION 1

### MATERIALS AND SUPPLIES

- Levon Biss photography (book and website)
- Ted Talk with Levon Biss
- Paper
- Clipboard
- Drawing supplies.
- Kid-friendly music of the Beatles from Amazon Music, YouTube or other music platforms. There are acoustic options, as well as lullaby versions.

### ACTIVITIES AND INSTRUCTIONS

- Students will choose a favorite beetle from a selection of 10 beetles on the screen.
- Students will sketch their choice. Students may add color to their designs. While students draw, play kid-friendly music of the Beatles.
- Students will watch the Ted Talk with Levon Biss and record their most important question or fact learned on the back of their sketches.
- All artwork will stay in the room until the project is completed. Students may add things that they work on at home, but their primary sketch must stay in the room.

### RESOURCES

Levon Bliss website: [http://microsculpture.net](http://microsculpture.net)

Levon Bliss book: “Microsculpture: Portraits of Insects”


Kid friendly Beatles music: Beat Bugs on YouTube- [https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw](https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw)

### ACCOMMODATIONS FOR INCLUDING ALL CHILDREN

- Adaptive art supplies
- Peer help
- Longer allotted time
- Ted Talk in smaller segments, instead of all in one sitting or pausing to discuss key vocabulary or concepts.
### SESSION 2

#### MATERIALS AND SUPPLIES

- Levon Biss website and Ted Talk
- Fact cards on 10 beetles (make these based on the student’s favorite beetles)
- Interactive art museum images from Levon Biss's world tour and website

#### ACTIVITIES AND INSTRUCTIONS

- Students will complete their drawing from session 1.
- Discussion of Ted Talk and art museum exhibits from Levon Biss's world tour.
- Discussion of the main points of the 10 beetles chosen for this project.
- Time in groups to record three beetle facts on the back of their artwork, written and/or drawn.

#### RESOURCES

[https://levonbiss.com/](https://levonbiss.com/) - interactive images of beetles and art museums from his world tour

#### ACCOMMODATIONS FOR INCLUDING ALL CHILDREN

- Adaptive art supplies
- Peer help
- Speech to text app
- Group recording of facts versus individual
- Headphones for individual music or to block sound
### SESSION 3

#### MATERIALS AND SUPPLIES
- iPads
- Garage Band app (or comparable)
- Various auxiliary percussion
- Chords marked on piano
- Keyboard and bells
- Chrome Music Lab site
- Quaver Music interactives
- Music map of 3 Beatles songs (see pages 28-30 for samples)

#### ACTIVITIES AND INSTRUCTIONS
- Students in small groups will explore improvising to a song by the Beatles, chosen by vote. Students will get to decide in their group which instrument or section they will play along with from woodwinds, brass, strings or percussion icons on Garage Band.
- Students who prefer to work alone, may choose from a variety of auxiliary instruments or playing chords on the keyboard, piano or bells.
- After some brief instructions on using Garage Band and etiquette, the music map will be put up on the screen for playing along (showing which notes/chords to play and when).
- There will also be maps in hard copy at the centers on music stands.
- The song will be played multiple times to allow each member to play.
- Teacher will tape a final playthrough for viewing in the next class.
- Students will end class by recording their favorite part of the day's events or observation on the back of their artwork.

#### RESOURCES
There are many YouTube tutorial videos available on using Garage Band

Chrome Music Lab- [https://musiclab.chromeexperiments.com](https://musiclab.chromeexperiments.com)


#### ACCOMMODATIONS FOR INCLUDING ALL CHILDREN
- Headphones
- Peer help
- Extra time
- Their own space to work, if preferred
- Exploring other apps
### SESSION 4

**MATERIALS AND SUPPLIES**

- Scarves
- Flashlights
- Kid friendly Beatles music
- Video of student improv from previous session

**ACTIVITIES AND INSTRUCTIONS**

- Students will watch the video clip of last visit's iPad improv.
- Students will be invited to move the room to a Beatles song of their choice or the clip that the class made previously.
- They will be invited to walk, go into character (such as a beetle/butterfly or acting out the song), or dance.
- A bin of scarves and flashlights will be provided for those who would like a prop.
- Students will sit after whole group movement and be allowed to move as solos or duets with their buddy.
- At the end, students will record their thoughts or observations or a small sketch of their chosen movement. Additional paper will be provided and attached.

**RESOURCES**

Kid friendly Beatles music: Beat Bugs on YouTube- [https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw](https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw)

**ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Additional time
- Additional space
- Headphones
- Peer help
- Paint brush to paint the air during movement
**SESSION 5**

**MATERIALS AND SUPPLIES**

- iPads
- Garage Band app (or comparable)
- Various auxiliary percussion
- Piano/keyboard/bells for chords
- Chrome Music Lab site
- Quaver Music interactives

**ACTIVITIES AND INSTRUCTIONS**

- This is the additional session on iPads for students to work in groups on their part of the Beatles music. They will keep the same group and the same song choice from the previous session. They will finalize their parts for their turn to improvise. Students may opt for an auxiliary instrument or playing chords on piano/keyboard or bells.
- At the end, students will record their thoughts and observations about their improv on the back of their artwork.

**RESOURCES**

[https://levonbiss.com](https://levonbiss.com) - interactive images of beetles and art museums from his world tour

**ACCOMMODATIONS FOR INCLUDING ALL CHILDREN**

- Headphones
- Additional time
- Additional space
- Auxiliary instrument
- Piano/keyboard/bells for chords
- Peer help
### SESSION 6

#### MATERIALS AND SUPPLIES

- iPads
- Garage Band app (or comparable)
- Levon Biss photography
- Flashlights
- Scarves
- Various auxiliary percussion
- Piano/keyboard/bells
- Chrome Music Lab site
- Quaver Music interactives
- Beat Bugs on YouTube

#### ACTIVITIES AND INSTRUCTIONS

- Grade level demonstration for other classes and parents of the project.
- Students will be invited to rotate to an art center to show their artwork, movement/acting or music to show their expression of the Beetles to Beatles project.
- Levon Biss's art will be projected.
- Audience members and parents may be invited to join their child/friend when it is their turn, as space allows.

#### RESOURCES

Science cards of beetle facts projected

Art museum pictures of Biss's world tour

Chrome Music Lab- [https://musiclab.chromeexperiments.com](https://musiclab.chromeexperiments.com)


Kid friendly Beatles music: Beat Bugs on YouTube- [https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw](https://www.youtube.com/channel/UCnmOiRzjv8ENjSPWqWYhrMw)

#### ACCOMMODATIONS FOR INCLUDING ALL CHILDREN

- Headphones
- Peer help
- Extra space
- Extra time
- Smaller audience
- Choice of apps or instruments
- Drawing or making observational notes on a recording device/reporter

**COMMENTS OR GENERAL NOTES**
This project outline is a basic parameter. Classes may thrive in one area more than another. Classes may need more time on certain elements. Teachers may opt to do the class meetings as time in each of the centers, verses one part of the project per class meeting. There are many wonderful resources online on beetles and movement, from science publications to YouTube, for movement references. The main idea is to enjoy the photography and to interpret it in a way that is meaningful and comfortable.
Beetles to Beatles

Project Samples, Shaner, 2020

Microsculpture

THE INSECT PORTRAITS OF LEVON BISS

From the collections of the Oxford University Museum of Natural History

WATCH THE FILM

5m 24s
At Levon Biss’s site, you can project the beetles onto your whiteboard for the students to see the information and imagery. I also bought the book on Kindle and in hardback.
You can watch the Ted Talk and see another video of his vision and hard work at his microsculpture.net site.
The students loved seeing the museum exhibits from all around the world on Levon’s site.
This is what the Flipgrid page looked like for the project. We were able to continue at home.
Another view of the Flipgrid assignment for the project.
This is the Microsoft Teams assignment, given to 2nd and 3rd grade students, while at home for the last nine weeks.
We chose our favorite beetles from the book and put the information in more kid friendly language for note taking.
At Chrome Lab’s website, you can use many different programs to create music and play along. These squares represent D, A and D.
At Chrome Lab, you can touch one note and the chord plays, for an easily accessible way to play along. You can change from major to minor.
The Rhythm page at Chrome Lab allows you to play along with several percussion instruments.
Spectrogram allows for visual representation of the sound waves. It also has a really cool drum machine. This is another fun page at Chrome Lab.
Quaver Music has some fun interactive instruments. This is Qstrum, where you can add in rhythm and chords and the guitar will play it.
Quaver has a nice selection of bells to virtually play. You can remove the bars that you don’t want to include, to help with playing in a certain key.
We used the Beat Bugs on Youtube, an animated music series that uses the songs of the Beatles in a sing along format.
There are many song choices on the Beat Bugs page on Youtube.

All You Need Is Love
1.8M views • 2 years ago
There is a Beat Bugs app, for students who have a device and are allowed to add items to their devices.
Here is a sample of a map that you could use for playing along. You could also create four bar rhythms, in traditional notation. Students could play on A, B, C, or D. We were at home, so we used an improv format. Students preferred to sing along, due to limited access to devices and instruments and the delay on Zoom.
Sample map, page 2, We Can Work it Out.
Page 3 of map for We Can Work it Out.

Chorus (*Drummers may play quarter note beat on chorus.)

We (can) work (it) out. (♫)

D D D

We (can) work (it) out. (♫)

G G A

Z clap-clap  Z clap-clap

Roll D on bells/sustain octaves on keyboards