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# ***INSECT ENCOUNTER*** **BAIP OVERLAY**

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An Overview of How to Apply Brain-Targeted Teaching® and Arts Integration to the Baltimore City SABES Classroom

SABES Content: **Grade 3, Unit 1 “Insect Encounter”**

Artform Focus: **Music**

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# Welcome Message



Dear educator,

Welcome to the Baltimore Arts Integration Project! We are excited to share resources and activities that help you bring the arts and brain-based pedagogy directly to your classroom with content that integrates seamlessly with your existing curriculum.

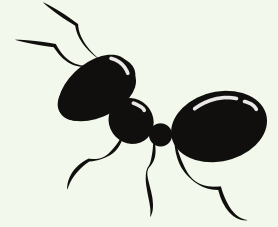
Studies show again and again how the arts are an ideal method for teaching for mastery because of their direct association with supporting long-term memory of content knowledge and skills. What is more, they bring more joy, connection, and a greater sense of belonging to learning experiences.

The Brain-Targeted Teaching® model (BTT) is an instructional model that guides educators in applying brain research for highly effective instruction. Arts integration is an approach to teaching in which students learn through the creative process of art making. Both concepts are the driving force behind the content below.

Happy teaching!

Sincerely,  
The BAIP Team

# Learning Unit Overview



## Welcome to Insect Encounter!

In this unit, students will explore the world of insects, including their life cycles, ecosystems, food chains, and roles within their colonies. By the end of the unit, students will develop solutions to keep ants outside.

In this arts integration overlay, we focus on helping students master the following science concepts and skills through song and music:

1. The ability to determine what characteristics make something an insect.
2. The ability to understand the unique roles ants play within their colonies and ecosystems.
3. The ability to explain how ants work together to keep their colony surviving and thriving.

**This arts-integrated Brain-Targeted Teaching approach offers several key benefits:**

- Provides students with engaging and effective methods for building ***long-term memory*** of content and skills.
- Allows students to ***multiple modes of expressing*** what they've learned.
- Seamlessly integrates ***music fine arts standards*** into the classroom in a meaningful and impactful way.

# Brain Target 1:

## The Emotional Climate



BTT prioritizes building positive and affirming learning environments. This allows the brain and body to be more receptive to the learning activities.

### For students:

To set up the emotional climate for learning and approaching these arts-integrated experiences, we suggest starting each class period with the *Opening Song: Good to Have You in the Band Today!* This activity will allow students to express their feelings that day while connecting to the theme of working together as a group, colony, food chain, food web, or ecosystem.

### For you as the teacher:

We recommend reviewing the activity sheets beforehand, as they cover all the essential vocabulary and music concepts needed for the activities. To thoroughly prepare for leading arts-integration experiences in your class, we've included "how to facilitate" videos for each arts-integrated activity in the online modules.

### For all:

We recognize that for many, the idea of music-making can be intimidating and some of us need more time to get comfortable than others. A gentle invitation to participate and a classroom where music-making is frequent can support those who may be more uncomfortable at first.

**We urge teachers and students to remember, as Claudia says, "Music-making is a part of the human experience. Whether we believe it or not, we're all musical. Our hearts are beating in rhythm. Our breath is a song that says we're alive."**

## Brain Target 2: The Physical Environment



A conducive learning environment is prepared through deliberate planning that incorporates novelty, order, and aesthetic elements in each unit. The balance between consistency and novelty is crucial: novelty stimulates creativity, while a familiar foundation provides stability.

**For this overlay, we suggest the following for setting up your optimal physical environment:**

1. Arrange the **desks** in groups to show how important group dynamics are to many species, from ants to humans!
2. Display **images** of different kinds of musical groups (orchestra, rock band, etc.)
3. Display pictures of instrument groups, including **vocabulary** and labels (included in the module resources)
4. Create a **Listening Lounge**/Performance Space (where the work songs can be performed)
5. Prepare **playlists** to go along with the musical group types included in the overlay that can be played at the start of class or in the background while working

# Brain Target 3: Big Picture Learning Design



Concept mapping is a pictorial method of big picture planning. By using a thematic graphic organizer, we show how Brain Targets 4, 5, and 6 work together with arts integrative activities to achieve this SABES unit's learning goals and objectives.

## Activity 1: Is It a Woodwind? Is It an Insect?

- Goes along with SABES Lessons 2-4
- Students will compare the way instruments are grouped to the way animals are grouped.
- Includes Card Matching activity and discussion questions to assess



## Activity 2: Ant Chant/Work Songs

- Goes along with SABES Lesson 11
- Students will participate in the "Ant Chant" to learn about the ant roles within a colony.
- Students will create their own "Ant Work Song" and perform it about one ant job in the colony.



## SABES 301: Insect Encounter

**WHY DID THE  
ANTS COME  
INSIDE?**



**Unit Driving Question**

## Daily Opening Song: Who Are You In the Band?

- Setting the Emotional Climate
- Daily check in with students to start class.
- "Who Are You In the Band Today?"



## Activity 3: Working Together: The Instant Orchestra

- Goes along with SABES Lesson 21
- Students will discover why working together is important for ants' survival and compare it to individuals in a band/orchestra working together in the Instant Orchestra activity.
- Discussion questions to reflect and analyze understanding.



## Brain Target 4: Mastery of Content, Skills, and Concepts



Brain Target 4 speaks to the educator's aim to facilitate knowledge acquisition where information transitions from short-term to long-term memory. Brain research highlights how neural networks for memory grow stronger with use. Therefore, the teacher's goal is to "hardwire" vital content by utilizing diverse learning experiences that allow for "repeated rehearsal" of core skills and knowledge areas. Arts integration is an ideal approach to teaching and learning to meet these aims.

## Brain Target 5: Application of Knowledge



BT 5 seeks to strengthen deeper thinking and learning by applying skills and content in meaningful, active, real-world tasks.

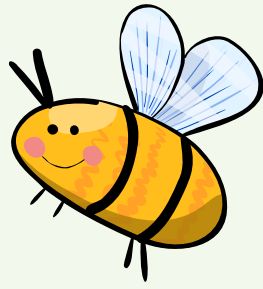
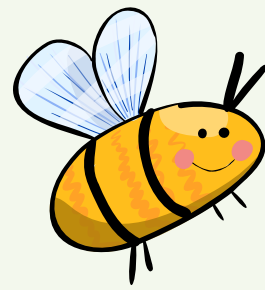
## Brain Target 6: Evaluation and Assessment



Evaluating instruction is as important to the learning process as meaningful learning activities. BTT emphasizes that relevant and timely evaluation is an ongoing, two-way process that begins almost as soon as the students' first introduction to a learning unit.

On the following pages are summaries of the BTT + Arts Integration Activities for mastering and applying content, skills, and concepts included in this overlay. Step-by-step directions (including printables and videos), as well as printable documents for student evaluation, are included later in this Arts Every Day resource set.





## ● Activity 1: Is it an insect? Is it a woodwind?

### 1. Science Objective | Pairs with SABES Lessons 2 - 4

SWBAT observe and examine insect anatomy and behavior to determine the characteristics necessary for an organism to be classified as an insect.

### 2. Artform

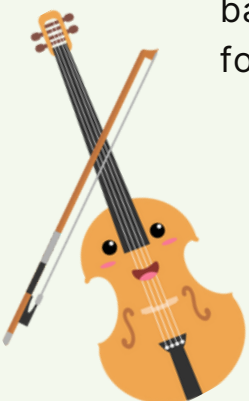
Music

### 3. Activity Summary

In this activity, students will determine what makes something an insect. To deepen understanding, after classifying different species into their proper categories (ex: ant is an insect, spider is not an insect), students will apply the skill of classification to musical instruments (woodwinds, brass, percussion, string).

### 4. Recommended Evaluation Style

Students will participate in a matching game at the end of the activity and try to place instruments into the proper categories based on their characteristics. This will serve as a self-assessment for students and a formative check for understanding for teachers.



## ● Activity 2: Ant Roles Work Songs

### 1. Science Objective | Pairs with SABES Lesson 11

Provide evidence and reasoning to support the claim that ants are an essential part of the ecosystem and identify the roles they play within it.

### 2. Artform

Music

### 3. Activity Summary

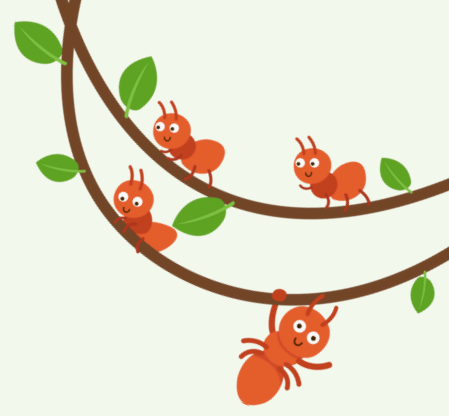
In this activity, students learn what the different roles are within an ant colony and their broader ecosystem. The “Ant Chant” serves as an additional, engaging method for presenting these concepts to students. The song explains the different roles ants can play (queen, worker, decomposer, predator, etc.), and its catchy melody supplies a mnemonic device for supporting students’ long-term memory.

In this activity, students will learn what a “work song” is. They will then write their own brief ant work song where they will pick one of the possible roles an ant might have and develop a short song about the job and its importance to the colony/ecosystem.

### 4. Recommended Evaluation Style

Students could be required to record the different ant roles in their student notebook and write their own descriptions about what each job entails. Students will be evaluated using a rubric for their created work song.





## ● Activity 3: Working Together

### 1. Science Objective | Pairs with SABES Lesson 21

Students will explore connections between the roles insects play in colonies and the roles people play within a band/orchestra. Students will support a claim with evidence based on observations that working together can help organisms survive.

### 2. Artform

Music

### 3. Activity Summary

In this activity students will learn how important it is for ants to work together to keep their colony thriving. They will then compare this to how the members of a band or orchestra have to work together to help it be successful.

Students will participate in an Instant Percussion Orchestra where they will play specific roles in conducting a basic percussion piece. They can explore what happens when one group does not do their job and how it can impact the entire orchestra or colony.

### 4. Recommended Evaluation Style

Teacher-student conference. Guiding questions can include:

- What ant role is most like a conductor in an orchestra and why
- Which part of a band is most similar to a builder in an ant colony and why?

