

## Bee Lesson - Preschool

### California Dept of Ed, Preschool Learning Foundations Volume 3 - *Life Sciences: Different Types of Plants and Animals*

#### **Lesson Name:** What Are the Parts of a Bee and What Do They Do?

2 30-minute sessions

steps 1-3 session 1, steps 4-5 session 2

#### **Steps**

1.

- Students look at and discuss the app images and links about Bees

2.

- Teacher demonstrates and/or shows app video to teach the Waggle Dance.

3.

- Teacher conveys the interdependent relationship of bees and their hives through app links for story suggestions about bee hive living

4.

- Students make a diorama on a paper plate folded in half, using colored pens and glue to create a bee hive using app diorama instructions.

5.

- Students sit in a circle and describe choices of line, shape and color of bee hive plate. Students point out a pattern noticed in a bee hive.

#### **Materials**

1. paper plates
2. colored pencils and pens
3. colored paper with solids and patterns
4. glue (and scissors if your students are ready or practiced)

#### **Learning and Demonstrating Goals**

##### ***Science connection Standards***

Observations to notice who lives in a bee hive and why, include what bees need to survive

Models to represent hives

Communicate choices for hive design, who lives there and the flight pattern of a forager bee.

##### ***Arts connection Standards***

Dance - Learn the Waggle Dance. Make bee movements using beginning, middle and end of an action (for example -prepare to fly, fly and land as a bee) and discuss your choices

Visual Arts – Identify and use line, shape and color to draw a bee hive; use scissors, paper and glue; identify time and places in art (for example - backyards with bee hives, in day light in a modern city); discuss their own art (for example - discuss their choices using line, shape and color in their analysis)

**Standards linked NGSS & VAPA** will add at the end as one glossary

2 20-minute sessions or 1 40-minute session

steps 1-4 Lesson 1, steps 5-6 Lesson 2

### **Steps**

1. Students look at and discuss the app images and links regarding bee hives
2. Teacher demonstrates and/or shows app video to teach the Waggle Dance.
3. Teacher conveys the interdependent relationship of bees and their hives through app links for story suggestions about bee hive living
4. Students make a diorama on a paper plate folded in half, using colored pens and glue to create a bee hive using app diorama instructions.
5. Students sit in a circle and describe choices of line, shape and color of bee hive plate. Students point out a pattern noticed in a bee hive.

### **Materials**

5. paper plates
6. colored pencils (pens if your students are ready or practiced)
7. colored paper with solids and patterns
8. glue (and scissors if your students are ready or practiced)

### **Learning and Demonstrating Goals**

#### ***Science connection***

Observations to notice who lives in a bee hive and why, include what bees need to survive

Models to represent hives

Communicate choices for hive design, who lives there and the flight pattern of a forager bee.

#### ***Arts connection***

Dance - Learn the Waggle Dance. Make bee movements using beginning, middle and end of an action (for example -prepare to fly, fly and land as a bee) and discuss your choices

Visual Arts – Identify and use line, shape and color to draw a bee hive; use scissors, paper and glue; identify time and places in art (for example - backyards with bee hives, in day light in a modern city); discuss their own art (for example - discuss their choices using line, shape and color in their analysis)

#### **Standards linked NGSS & VAPA**

will add at the end

6. Teacher and students stand in a circle facing each other. Teacher models clapping, slowly, students join (1 minute). Teachers models tempo (fast and slow) and invites students to follow each. Teachers models dynamics (loud and soft) and invites students to follow each. The goal is make sounds at the same time. Teacher asks students to clap together applying tempo and dynamics. Teacher invites students to lead one if that works in your class (4 minutes).

Follow with students working individually to explore making their own combination of clapping sounds using whatever they like expect their faces. Students work simultaneously (can be a little noisy) (1 minute).

End with short discussion regarding what actions different clapping combinations can suggest (for example, fast and soft might sound like rain falling on a roof) (2 minutes).

7. Teacher plays app links of music and sounds (30 to 60 second of each and at least 2 of each category). Students have brief conversation about what actions the music and sounds can suggest.

8. Students sit down to write a short list of events and places in their neighborhoods they notice are important to the neighborhood (for example, the bus stop, corner store, library, bakery, police station, gas station) (1-2 minutes). Students share parts of their list to whole group (1-2 minutes).

9. Teacher plays app links to share the key requirements needed for a hive to thrive.

10. Working in groups of 3 or 4, each student develops a clapping sequence. Half of the groups for events and places needed for a hive to thrive and the other half for events and places in human neighborhoods.

One example of a sequence is 8 counts repeated 4 times. Students work simultaneously. (4 minutes).

Each student then teaches their sequence to their group members (2 minutes).

Students then decide the order of the clapping sequences and practices them as a group (2 minutes). This whole section can be noisy.

11. Students standing in their groups, present their sequences to the whole group. After each group presents the teacher asks about and notes what events and places they believe they heard represented from either a hive or human neighborhood. After all groups have shared the Teacher asks each group what they were representing with their sequences. Class then discusses the overlap between hive and human neighborhoods. Class also discusses how tempo and dynamics were used to convey events and places that could be in either neighborhood.

### **Materials**

9. links to recordings of sounds and music on the app
10. links to key requirements near a hive for the hive to thrive
11. paper and pencils

### **Learning and Demonstrating Goals**

#### ***Science connection***

Observations to notice what lives near a hive that thrives and name essential requirements.

Model and Communicate events and places that live near a hive that thrives using a clapping sequence.

#### ***Arts connection***

Music- Create a clapping sequence of sounds from a hive or human neighborhood. Using beginning, middle and end of an action, create a flight path for a bee or walking path for a

human in its neighborhood (for example -prepare to leave the house or fly, walk or fly and arrive or land as a bee) and discuss your choices.

**Standards linked NGSS & VAPA**

will add at the end as one glossary