**Waggle Dance Relay**

**Additional Activity**

Bees in a colony work with each other to gather food and try to find the most pollen and nectar in the least amount of time possible. Bees communicate messages to other bees about where pollen and nectar are through a waggle dance. The dance is used to get other bees to help collect resources for the hive.

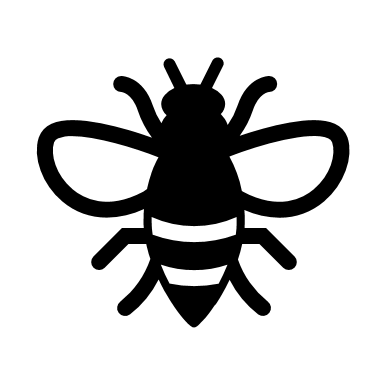
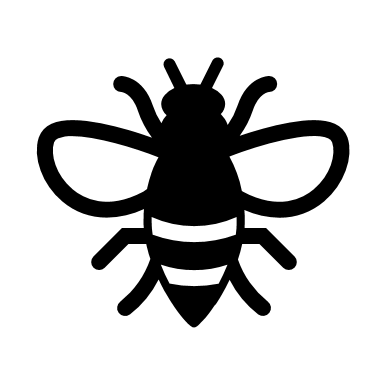
We are going to do a human version of the waggle dance to decode messages. First break into groups, or hives. We recommend groups of 5-10. One member of the group will be our first worker bee. The worker bee will open one of the messages. That bee must communicate the message to the rest of the group using the waggle dance moves. Students are not allowed to speak to one another.

The group must correctly translate the message verbally. Then the group must correctly dance the message back to the worker bee. The activity leader, or teacher, will determine if the message has been translated correctly. After correct translation, the group will earn a pollen grain (or another prize). The hives who has collected the most pollen at the end wins the game.

This activity will run about 20 – 30 minutes. It is recommended that as a class you practice the moves all to familiarize everyone before starting the game. If students get stuck, allow the groups to translate one line at a time. You can also shorten the messages from 8 lines to 5. After the game ends, allow students to create their own messages for others to translate. If the messages are too easy, try adding a few lines to the message.

**Waggle Dance Moves:**

* Spin clockwise = turn right
* Spin anti clockwise = turn left
* Walk in place = go forward (each step is forward one)
* Jump = go up
* Crouch = go down
* Criss-cross = turn around
* Hands in the air = reverse (each wave is back one)
* Jumping jack = back to the hive

**Waggle Dance Messages**

go forward 5

turn right

go forward 3

go up

turn around

go back 2

turn left

back to the hive

turn left

go forward 6

turn right

go down

turn around

reverse 2

go forward 2

back to hive

go forward 4

go down

go forward 2

turn left

reverse 3

turn right

turn around

back to the hive

turn around

reverse 5

go up

go forward 6

turn right

go down

turn right

back to hive

reverse 8

turn left

go up

turn right

go forward 3

turn around

go forward 4

back to hive

go up

go forward 7

turn around

go down

reverse 3

turn left

go forward 4

back to hive

go forward 6

turn right

go down

turn right

go forward 8

turn around

go forward 4

back to hive

reverse 3

turn around

go forward 5

go up

reverse 2

turn around

reverse 6

back to hive

turn right

reverse 5

go down

turn left

go up

go forward 5

turn around

back to hive

go forward 7

turn around

go up

turn left

reverse 5

turn right

go forward 4

back to hive