Name: $\qquad$
Directions: Follow the step-by-step instructions to use the Waggle Dance to communicate with your "bee-mates" where the closest food source is located.

The Goal: To be able to communicate where the food source is by Waggle Dancing.

## The Rules:

1. No speaking to tell other classmates where to go.
2. The only way to communicate to the hive is by waggling.


## Practice the Waggle Dance!

If the food source is.....
Nearby: Do 5 seconds of Waggles.
Medium: Do 10 seconds of Waggles.
Far: Do 15 seconds of Waggles.

1. Face the direction of the food source.
2. Walking forward, waggle your bottom to the left and then to the right while walking.
3. When waggles are completed, stop and circle to the right without waggling, back to start.
4. Waggle-walk again, the same distance from step 2.
5. Then stop and circle to the left without waggling, back to start.
6. That's one waggle dance!
7. Repeat steps $1-6$ to relay the message again!

## How to find the distance?

Decide how far away the food source is by using a stopwatch!

The length of time of completed "waggles" tells the other bees how far the food source is.

Direction: Use the space below to sketch out your dance! You can use arrows to help you.


DID YOU KNOW?!
Bees are natural mathematicians!

This form of waggle dance is special to the dwarf honey bee species called the Apis florea.

Research scientists have discovered other species of bees that use a different method to the waggle dance!

