

# Waggle Dance



## What Is this Activity?



How do busy bees “tell” each other where to find pollen? In this game, you and your child play bees who find “pollen” by doing a dance.

**Big Science Idea:** Bees and flowers depend on each other to survive and thrive.



## GO OUTSIDE

### What You’ll Need:

Ribbon or similar colorful marker, scissors to cut the ribbon, “Doin’ the Waggle Dance” handout, video or phone camera (optional)

1. **Take your child to an enclosed outdoor** area that has trees, bushes, and other places to hide objects—your backyard or a park, for example.
2. (Optional, if flowers not in season.) On the way there, **check out any flowers** (without trespassing, of course). What colors are the petals? Which blooms are scented? Is there pollen (a white, yellow, or brown powder)? Any bees?
3. **Explain** that pollen is food for bees. (It’s a high-protein meal, like a burger; the flower’s nectar is a sugary snack, like soda.) Bees find pollen by zeroing in on the color or scent of a flower. They collect what they can and then tell the bees back at the hive where to find it.
4. **Wonder aloud:** *Bees can’t talk; so how do they “tell” the other bees where the pollen is?*
5. **Demonstrate and practice the Waggle Dance** (see diagram on handout), a simple way to understand how bees communicate. Look around for a source of human food (or, if there isn’t a restaurant in sight, choose any object) and follow the steps on the diagram together to communicate its direction and distance.
6. **Play the Waggle Dance Game:** Standing in the center of the play area, close your eyes and count to 10 while your child secretly hides a “flower” (the colored ribbon). Your child then returns to you and does the Waggle Dance. How fast can you find the flower?
7. **Repeat the game**, switching roles if you like, until you’re champion Waggle Dancers!
8. **Discuss:** *Where can bees in our city find flowers? Why do flowers make food for bees? What’s in it for them?* Explain that some of the pollen sticks to the bee’s body and so gets carried to another flower. That flower uses pollen to make

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one mission at a time  
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### Topic

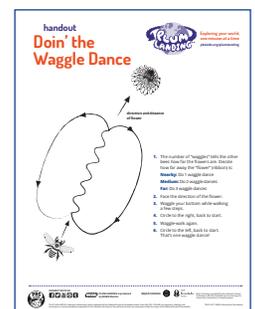
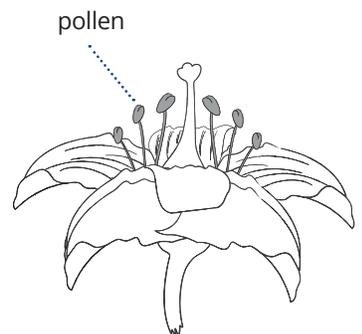
communication,  
ecosystems

### Activity Type

outdoors (all weather—  
rain, clouds, sun, or snow)

### Activity Time

15–30 minutes



seeds, which can grow new flowers. Bees would starve without pollen and nectar from flowers; flowers would die out without bees to help them make seeds.

## EXPLORE SOME MORE

### The Brick-Eating Ivy Mystery

Watch this short video that shows another example of how plants and animals depend on each other to grow and survive. Gabi and Oliver explore whether ivy can really destroy buildings and cause them to collapse.

### Go See Bees

**Caution: Do not do this activity if your child is allergic to bees.**

Where? Visit a local urban beekeeper who gives tours, a zoo, a science museum with a beehive on display, or an outdoor public garden with plenty of blossoms. Outdoors, watch the bees calmly from a safe distance. Bees won't sting unless they feel threatened.

### Outdoor Family Fun with Plum App

This app gets families outdoors exploring the world. Every day, the app offers five outdoor missions to get everyone thinking and talking about nature and the science that's all around us.



**VISIT [pbskids.org/plumlanding](http://pbskids.org/plumlanding) to find apps, videos, games and more activities.**



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MAJOR FUNDING



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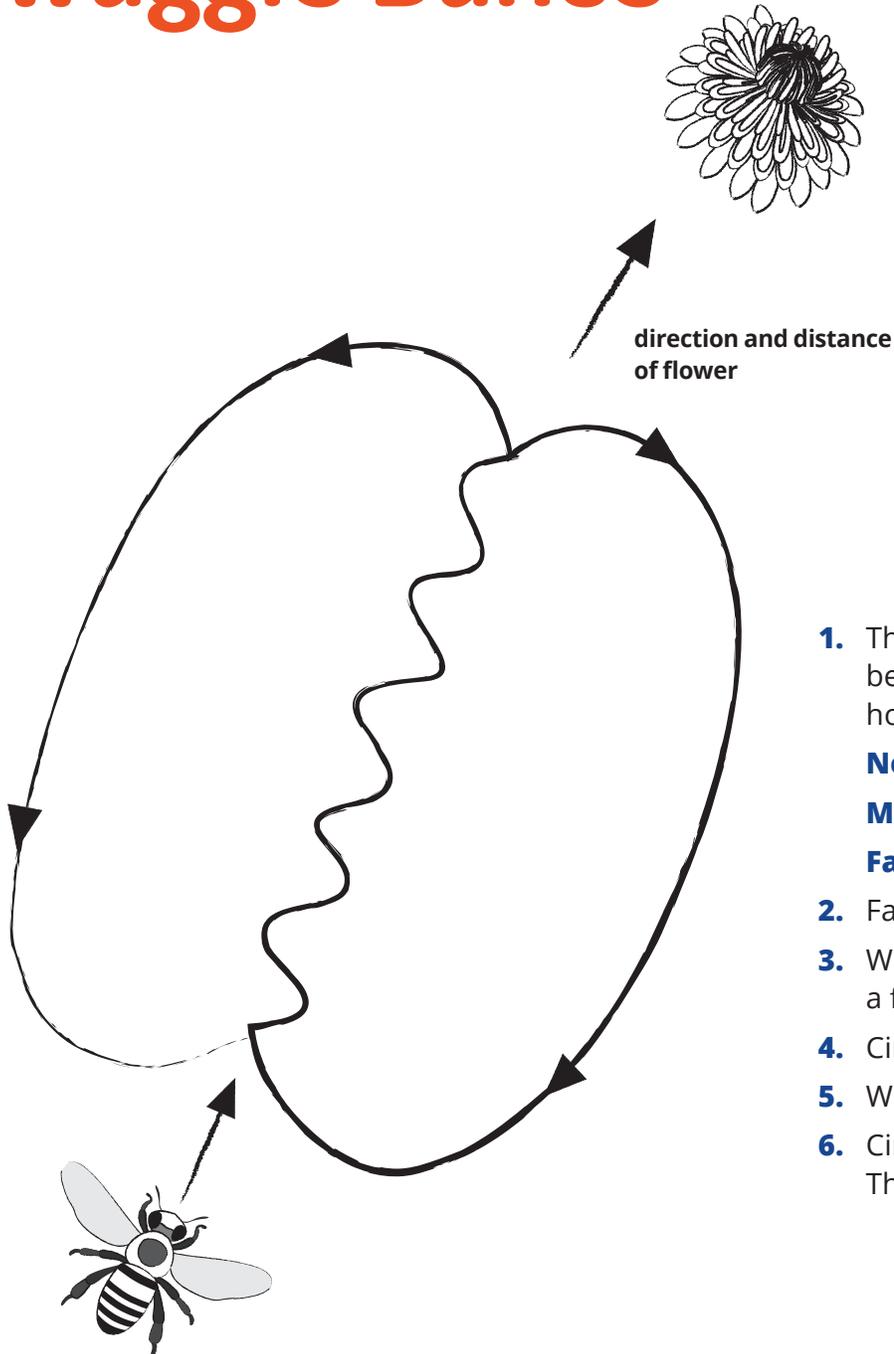
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handout

# Doin' the Waggle Dance



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1. The number of “waggles” tells the other bees how far the flowers are. Decide how far away the “flower” (ribbon) is:  
**Nearby:** Do 1 waggle dance  
**Medium:** Do 2 waggle dances  
**Far:** Do 3 waggle dances
2. Face the direction of the flower.
3. Waggle your bottom while walking a few steps.
4. Circle to the right, back to start.
5. Waggle-walk again.
6. Circle to the left, back to start.  
That's one waggle dance!



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