

WALK WITH ROSIE

Big Idea Focus: Mathematics can be used to specify precisely directions, routes, and locations in the world.

In this lesson, children:

- Follow directions using position words
- Use spatial reasoning to move their bodies through space
- Draw pictures to represent spatial relationships (KG goal)

Materials

- *Rosie’s Walk* by Pat Hutchins
- Chart paper and markers

1. Read *Rosie’s Walk*

Read this brief book several times with children. First, focus on the narrative of the story, told mostly through the illustrations, of Rosie the hen’s walk and the fox’s unsuccessful attempts to catch her.

Next, focus children on the position words that describe Rosie’s path. Make a list of the position words from the story. Ask children to add words to the list to describe the fox’s path. For example, the fox jumps **on** the rake, splashes **in** the pond, and falls **through** the haystack.

2. Create a New Path for Rosie

With children’s help, construct a simple obstacle course using classroom furniture or play equipment outdoors. Using position words, describe a path for Rosie to walk. For example,

- Go **across** the rug,
- Crawl **under** the table,
- Jump **over** the jump rope,
- Go **between** the chairs, and
- Sit **near** the wall.

Have each child take a turn as Rosie and walk the path you have described. As each child moves through the obstacle course, chant the directions aloud to help children connect position words with spatial relationships.

Repeat as time allows.

Planning Tips

Find an open space, indoors or outdoors, where you can construct a simple obstacle course using classroom furniture or play equipment. Plan to repeat the activity with **small groups** so that all children can have a turn.

Math Language Learning

Many young children understand concepts related to position and spatial relationships before they have the language to describe them. This means that children may be able to follow directions based on position words, but confuse them in their own speech.

Because position words such as **over**, **through**, **across**, and **under** describe objects in relation to one another, they can change depending on one’s perspective. This makes learning position words a challenge for all children, but especially for English Language Learners.

Observation

Can children connect position words to movements of their bodies through space?

Do children need one prompt at a time, or can they follow multi-step directions?

3. Draw a Map for Rosie and Close the Lesson

Work together as a group to make a simple map that shows where Rosie went on her new walk. With your finger, trace her path on the map while chanting the same directions that children moved through the obstacle course. Give children a turn tracing Rosie's path with their finger and using position words to describe it.

Tell children that you will leave *Rosie's Walk* and blank paper in the Writing or Math Center for them to make their own maps for Rosie. When children make their own maps, help them add labels. Also, children can dictate stories about where Rosie (or the fox!) goes walking.

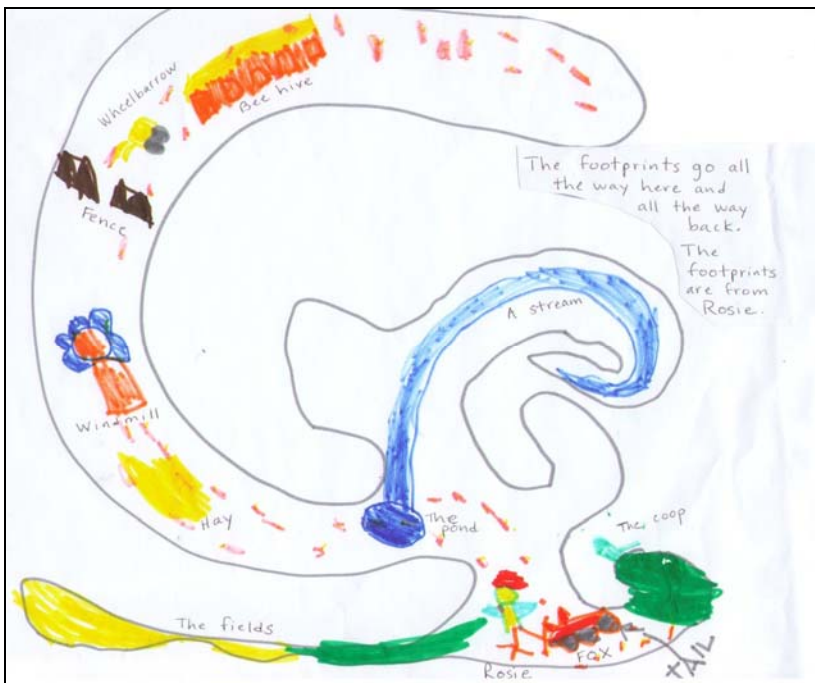
Differentiation

Depending on the age and interest of children, adjust your level of support for drawing Rosie's map. Making maps involves representing spatial relationships in two dimensions. Do not expect children to make accurate maps yet; the goal is for them to explore how to represent spatial relationships.

Teacher as Learner

Gender differences in spatial ability, which emerge before the time children enter kindergarten, are well documented in scientific literature.

In your own life, have you noticed a gender gap in spatial ability? If so, what do you think might explain it? Do you think gender differences influence your mathematics teaching?



A map for Rosie with dictation by a 4-year old child