A book about position, direction, and movement

Aim

Where is Hare? describes the paths of two characters as they compete in a race. The book introduces language to describe position, direction, and movement.

These whole-class activities provide students with the opportunity to:

- listen to a story about reading maps
- use materials to act out the story
- · describe position, direction, and movement
- use the *Teaching Tool* to follow, record, and write directions
- write a letter about direction and movement

Activities

- 1. Listening to the story
- 2. Reviewing directions
- **3.** Acting out directions
- 4. Using materials to act out the story
- 5. Developing directional language
- **6.** Using the teaching tool to follow directions
- 7. Using the teaching tool to record directions
- 8. Using the teaching tool to solve problems by working back
- 9. Writing a letter to give directions



FOR MATHEMATICS

I. Listening to the story

Resources

• Where is Hare?

Activity

Show the cover of *Where is Hare?* to the students and read the title aloud. Encourage volunteers to predict what they think the story might be about. Slowly read the story. At the conclusion of each double-page spread have the students identify the location of the tortoise and hare and the next stop in the race. Then ask, **What happened in the race? What did the tortoise do? What did the hare do?** Encourage students to explain that despite being faster, the hare lost the race because he did not read the map. Next, read the story again and have the students identify how to move from one location to the next. Ask, **Which is the shortest path?** For pages 16–17 have the students to compare the paths taken by the tortoise and the hare. Ask, **Where did the hare finish the race?**

2. Reviewing directions

Discuss directions that the students may be have heard or seen. Ask, Have you ever been given directions? What were they? Promote further discussion by asking, How would you direct someone from our classroom to the school entrance? Through this discussion bring out the directional language of forward, back, left, right and so on. Next, take the students outside and have them stand a little apart from each other. Ensure that all the students are facing you. Say, I am going to say a direction and I want you to move in that direction. Ready? Move one step forward. Move two steps left. Move one step right. Move one step forward. Move two steps back.

3. Acting out directions

Resources

Masking tape or chalk

Preparation

In an open space either in the classroom or outside, use tape or chalk to mark out a large grid that is two squares by three squares.

Activity

Have the students stand in a line (one behind the other) at one corner of the grid. Tell the students that they must walk slowly along the lines as they follow your directions. Allow one student at a time to walk along the gridlines as you call out directions, **Go forward, turn left** and so on. Extend the activity, by introducing and using ordinal terms in the directions, for example first left, or second right.



4. Using materials to act out the story

Resources

· Where is Hare?

Activity

Open Where is Hare? to pages 4–5 and ask, Where is the starting and finishing point of the race? Where is the first stop of the race? Read pages 4–5 to confirm this. Invite a student to use their finger to show the shortest route from the starting point to the first stop. Develop directional language by asking students to describe the route. Repeat for the remaining pages of the book.

5. Developing directional language

Resources

- Where is Hare?
- 1 counter

Activity

Read pages 4–5 of Where is Hare? and ask, How can we move from the starting point of the race to the shop? In which direction will we need to move? Slide the counter along the path to represent the directions recommended by the students. Remind the students that the directions must be specific. Demonstrate this need, for example, if students say 'up', slide the counter straight up past the turn to the shop and into the lake. Encourage students to explain that you need to move up and then take the first right turn. Repeat for the remaining pages of the book.



6. Using the teaching tool to follow directions



Resources

Teaching Tool

Activity

Ensure that all the students can see the *Teaching Tool*. Drag the green star counter onto the path beside the shop. Tell the students that the counter represents the starting point. Drag

the orange star counter onto the path beside the bridge over the lake. Tell the students that the counter represents the finishing point. Next, activate the writing tool and have volunteers direct you how to move from the shop to the bridge. Discuss the effectiveness of their directions and repeat for other routes. After a few routes, invite volunteers to use the writing tool and be directed along routes



7. Using the teaching tool to record directions



Resources

• Teaching Tool

Activity

Ensure that all the students can see the *Teaching Tool*. Place a green star counter on the map to represent a suitable starting point, for example the train car. Say, **This counter is the start**. Activate the writing tool and challenge the students to record the directions you take to move to another location on the map, for example the oak tree. Ask, **Where did I finish?** Reset the *Teaching Tool* and drag the green star counter back to the start position. Then select a confident volunteer to read their directions and another student to use the writing tool to confirm that the directions provided by the first student are correct. Then challenge the students to find another way. Invite students to draw their alternate path and describe their directions to the class. Reset the *Teaching Tool* as needed. Ask questions such as, **Which way is shorter?** Is there a longer route? Repeat for other routes as time allows.



8. Using the teaching tool to solve problems by working back



Resources

Teaching Tool

Activity

Ensure that all the students can see the *Teaching Tool*. Drag the green star counter onto one of the locations on the map, for example the cave. On the board, write simple directions of how you got to the cave from your starting location which could be for example the path just below the forest. Do not include the starting location in the directions. Challenge the students to use your directions and work back to find where you started. Invite students to present their answers and describe how they figured it out. Repeat as time allows.

9. Writing a letter to give directions

Resources

· Sheets of paper

Preparation

• Each group of students will need a sheet of paper.

Activity

Inform the students that they are going write the race directions for Hare to help him win the race. Allocate each group of students a section of the race, for example from the oak tree to the cave, and have them write a simple set of directions for Hare to follow. In their letter, students should also remind Hare of the importance of following their directions. Afterward, select a member from each group (following the race route) to read their letter to the class.

