

Describing an Object's Position



Focus: Students describe the relative position of objects and follow instructions to place objects in identified locations.

Specific Curriculum Outcomes

Students will be expected to:

- 27.0 identify problems to be solved [GCO 2]
- 34.0 describe the position of an object relative to other positions or stationary objects [GCO 1/3]
- 35.0 place an object in an identified position relative to another object or position [GCO 1/3]
- 36.0 follow a simple procedure [GCO 2]

Performance Indicators

Students who achieve these outcomes will be able to:

- use positional language to identify the position of objects relative to other objects or positions
- give and follow instructions to place an object in a specific location relative to another object

NOTES:

Attitude Outcome Statements

Encourage students to:

- show interest in and curiosity about objects and events within the immediate environment [GCO 4]

Cross-Curricular Connections

English Language Arts

Students will be expected to:

- communicate information and ideas effectively and clearly, and to respond personally and critically [GCO 2]
- respond personally to a range of texts [GCO 6]
- use writing and other forms of representation to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imaginations [GCO 8]

Getting Organized

Components	Materials	Before You Begin	Vocabulary
• <i>Where's My Hockey Sweater?</i> (Read Aloud) • Science Card 4 • Science Card 5 • BLM <i>Pirates and Props</i> Literacy Place: • <i>Where's Walrus?</i> (Wordless Book – Active Learning Kit) • <i>Movie Poster</i> (Conversation Card # 15 – Active Learning Kit) • <i>Map</i> (Conversation Card # 13 – Active Learning Kit)	• copies of 100s chart (1 per student) • highlighters, markers, colouring pencils, or crayons • Sticky Tack (optional) • digital camera (optional) • students' Science Journals	• Arrange to laminate students' coloured images from BLM <i>Pirates and Props</i>.	• stationary Positional terms such as: • above • below • beside • between • near • far

Science Background

- Relative position is a point defined with reference to another position, either fixed or moving.
- The motion of an object is always judged with respect to some other object or point.

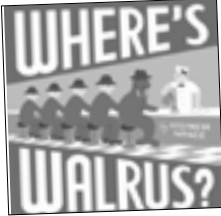
ACTIVATE

I Spy



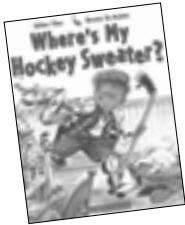
Play a game of “I Spy” with students using riddles that describe the relative position of various objects, e.g., “I spy something that is beside the chair, in front of the bookcase.” With students, brainstorm specific terms of reference to describe position (e.g., near the door, below the desk, between the windows). Add the position words to the Word Wall.

Literacy Place Connection:



Revisit or share *Where's Walrus?* by Stephen Savage. Challenge students to describe Walrus' position relative to other positions or stationary objects shown in the illustrations. Explain that stationary objects stay in one place and don't move. Add “stationary” to the Word Wall.

Read Aloud: *Where's My Hockey Sweater?*



Summary

Nicholas needs to hurry and search through his messy room and the rest of the house to find his hockey gear in time for the first practice of the season.

Before Reading

Ask students to think of a time when they searched for something they had lost. Ask:

- **Where did you search? Did you look inside a drawer or under your bed?**

Tell students that you will be reading a story about a boy who is searching everywhere for his hockey equipment. Ask them to listen as you read aloud and to look closely at the illustrations so that they can use positional language to describe where Nicholas looked for and found his missing equipment.

During Reading

As you read the story to students, pause frequently to discuss the text and illustrations. Alternate between asking students to respond in a whole group or with a partner. Prompts for discussion could include:

- **Do you think it would be difficult to find something in Nicholas' messy room?**
- **Where did Nicholas find his shoulder pads?** (on the floor, under shirts, socks, and pyjamas)
- **Where did he look for his helmet but found his shin guards instead?**

- Describe the location of his rain boots, ski boots, and flip-flops.
- Where were his hockey pants?
- Describe where Nicholas looked for his skates. Where did he finally find them?
- Where did Nicholas leave his skates as he looked for the rest of his equipment?
- Where did Nicholas look for his helmet this time?
- Where was his hockey stick?
- What strategy did Nicholas use to help him find his sweater in his messy bedroom? (he cleaned up the mess)
- Everyone tells Nicholas that he needs to keep track of his stuff. Do you agree that this is important? Why or why not?

After Reading

Place *Where's My Hockey Sweater?* in the Reading Centre and invite pairs or small groups of students to play a game of "I Spy" using the book. One student can identify an object shown on the page and the partner or another group member can use positional language to describe where the object is located. Students can take turns choosing the objects to be found. If a student would like to play a game of "I Spy" alone, encourage them to find and record the location of the cat in each illustration.

CONNECT



Choose a Toy

Ask students to think about a problem that could be solved by describing the position of an object (e.g., calling home to have a parent find an object, such as swim goggles or a book; or identifying a specific item in a store). Then display Science Card 4 and tell students that they are customers at a toy store. Ask volunteers to pick out a robot toy they would like to buy. Since there are several of the same robot, ask them to describe the object as specifically as possible according to the object's position (e.g., I'd like the black robot that is beside the blue and red robot on the top shelf above the large green robot.).



Literacy Place Connection:

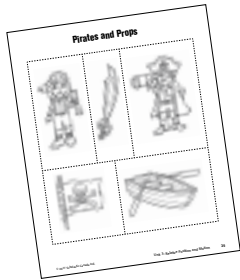
Display *Movie Poster: How Anansi Outsmarted Snake* (Conversation Card # 15). Identify the character of Anansi the spider and then invite students to describe the positions of the various characters relative to each other.

Colour a Path

Provide a copy of a 100s chart to each student. Give oral directions for students to colour a path with a given starting point (e.g., start at #26, colour 3 spaces

to the right and then 4 spaces down), then have students identify the number. After several teacher-led games, students can play in pairs or small groups taking turns to give the oral directions.

CONSOLIDATE



Treasure Map

Show the students Science Card 5. Discuss the treasure map with the students, asking them to find and describe the position of objects shown relative to other positions or stationary objects on the map. Alternatively, you may choose to display the digital version with a grid over the image (see the Teacher's Website).

Then, provide copies of the BLM *Pirates and Props* and invite students to cut out and colour the items they would like to add to the map. Students can give directions to place an object or person in an identified position and have another student place the item as directed. (If the cut-outs are laminated, they can be re-used repeatedly and attached to the card with Sticky Tack.)

Note: The use of a compass rose is beyond expectation for Social Studies 2. However, students who are able may be shown how to use the compass rose as another way to describe the relative position of objects on the map.

Toy Shelf

Create a toy shelf from objects found in the classroom and direct students to add additional toys, or to move existing toys, to specific locations on the shelf. After several experiences, invite students to take turns giving the directions.

Barrier Game

Invite students to play a barrier game with a partner. Students place small objects on a grid and then give clues for their partner to find them. Or, students could play a modified game of battleship. When students miss, their partner gives clues (e.g., number of rows up or down, or columns to left or right).



Literacy Place Connection:

Display *Map: Pine Valley Wildlife Centre* (Conversation Card # 13) and encourage students to use positional language to describe how to find the location of specific buildings or locations on the map. Alternatively, students could work in pairs at a centre taking turns to direct each other to find and identify specific locations on the map.

EXPLORE MORE

Here I Am

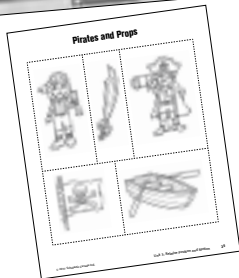
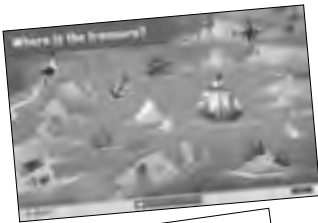
Take a photo of your class on risers or stairs. Display the photo and invite students to describe the position of a classmate relative to their own position in the photograph (e.g., Carlo is three rows behind me and two students to the left).



Or, you might take a photo of 6 or 10 students creating a human pyramid in the gym. (Be sure to place gym mats on the floor.) Students can draw a representational diagram of the photo in their Science Journals and record the position of each student relative to the other students in the photograph.

Adventure Story

Students can use the map on Science Card 5 and the BLM *Pirates and Props* images as the basis for an oral or written adventure story. They can then share their story, moving the characters and props to illustrate the action. Encourage students to use the scientific terminology related to relative position and motion in their stories. Alternatively, a second student could act out the actions while the first student tells or reads their story aloud.



Pirates and Props

