

Fly Away

Name: Answer Guide

Date: _____

Vocabulary

Compass - a tool used to show the current directions based on Earth's magnetic field

Scale - the distance measured on a map that represents the actual distance in real life

Introduction

Reading a Map

- 1 Ari is located on the blue dot and flying North over Ice Cream Island. What towns will Ari fly over if they continue flying North until they reach the ocean on the other side?

Cotton Candy, Ice Blue, Berry, Cherry, Orange (maybe the corner of Mint)

- 2 When Ari crosses the border over Cherry Town, they adjust their flight to travel in the Northeast direction. What town(s) will they fly over?

Just Cherry Town

- 3 If Ari wanted to fly over every town in Ice Cream Island for at least 5 km, how would you suggest they achieve this goal? Draw Ari's path and write a possible flight plan below:

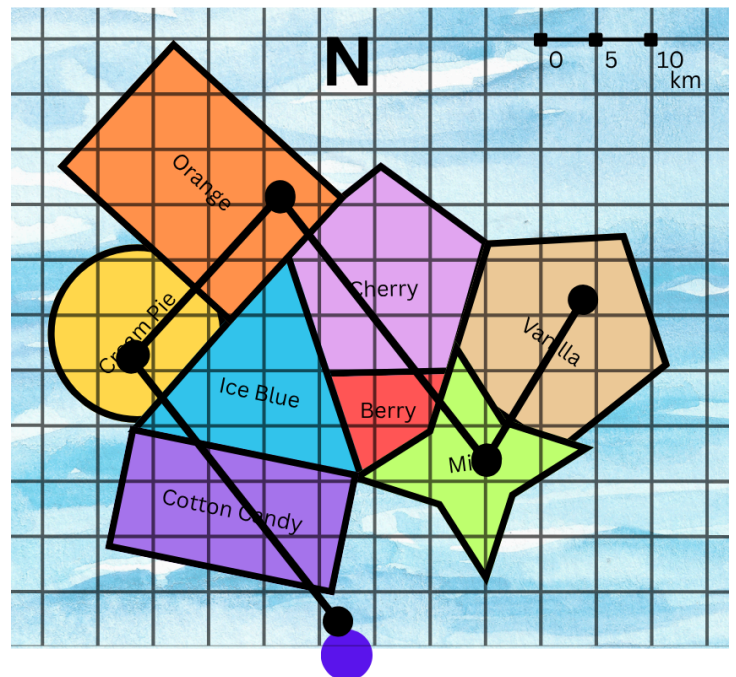
Possible path indicated in black on the map.

Fly 30 km Northwest

Fly 20 km Northeast

Fly 30 km Southeast

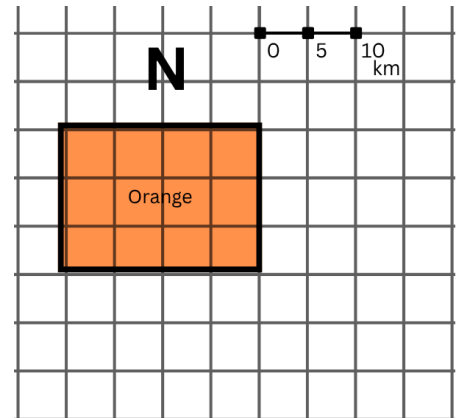
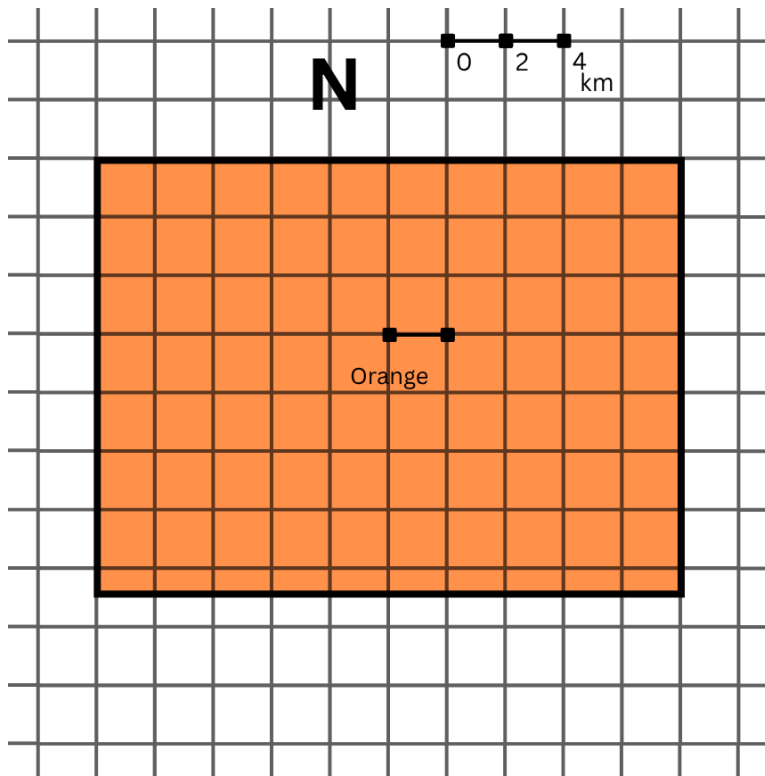
Fly 15 km Northeast



Activity 1

Scaling Orange Town

1 Orange Town is building a landing strip for Ari to visit. Ari needs exact information about the area to safely land. Use the scale to create a new map of Orange Town below using the new scale.



2 What do you notice about the map of Orange Town when you change the scale?

Orange town appears larger on the grid when the scale represents a smaller distance.

3 If Orange Town is building a landing strip for Ari 6 km south of the center-most point on the Northern border of the town, draw a dot on the map showing where the start of the landing strip would be located. If the landing strip begins at this point and is built for Ari to land while traveling East and is 2 km in length, draw a line showing where the landing would be for Ari.

The black line on the grid above indicates where the landing strip is built.

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Activity 2

Flight Patterns

Ari is on their next adventure on Ice Cream Island. Draw the flight Ari's around the island and answer the questions during their journey.

- 1 Ari begins at the blue dot on the map. They fly 15 km North. They then adjust their course and fly 15 km east. Draw their path.

What town are they visiting?

Mint Town

- 2 From this location, Ari wants to visit the Northeast coast of Vanilla Town. Draw their path.

How far and in what direction should they travel?

20 km Northeast

- 3 From their location in Vanilla Town, Ari travels west 30 km. Draw their path.

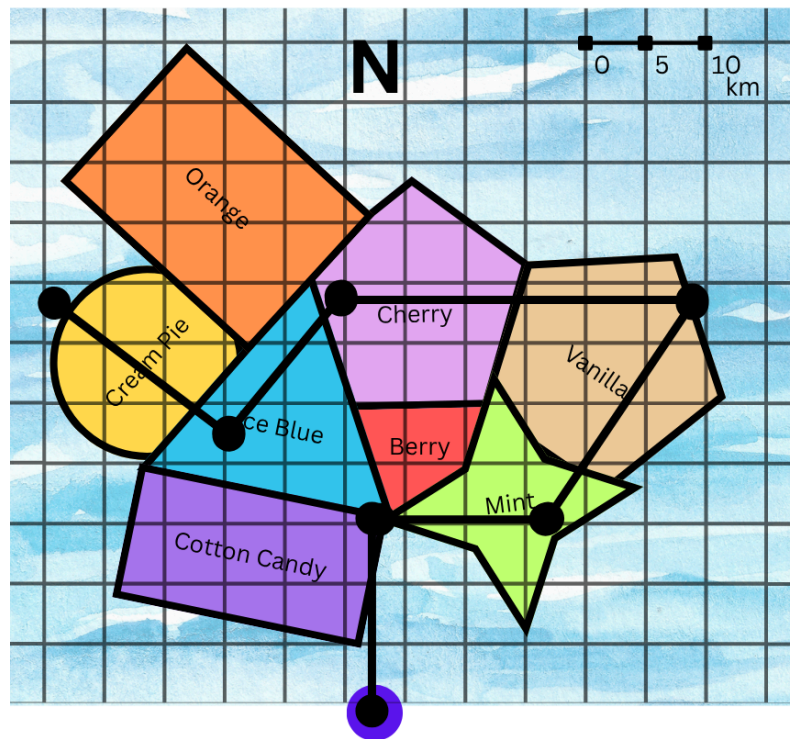
What town are they traveling over?

Cherry Town

- 4 They adjust course and travel southwest 15 km. Draw their path.
What town are they traveling over? Ice Blue Town

- 5 Ari adjusted their course again, now heading Northwest to the ocean. Draw their path.
How far will they have to travel to reach the ocean? 15-20 km

What town will they fly over before reaching the ocean? The rest of Ice Blue Town and Cream Pie Town



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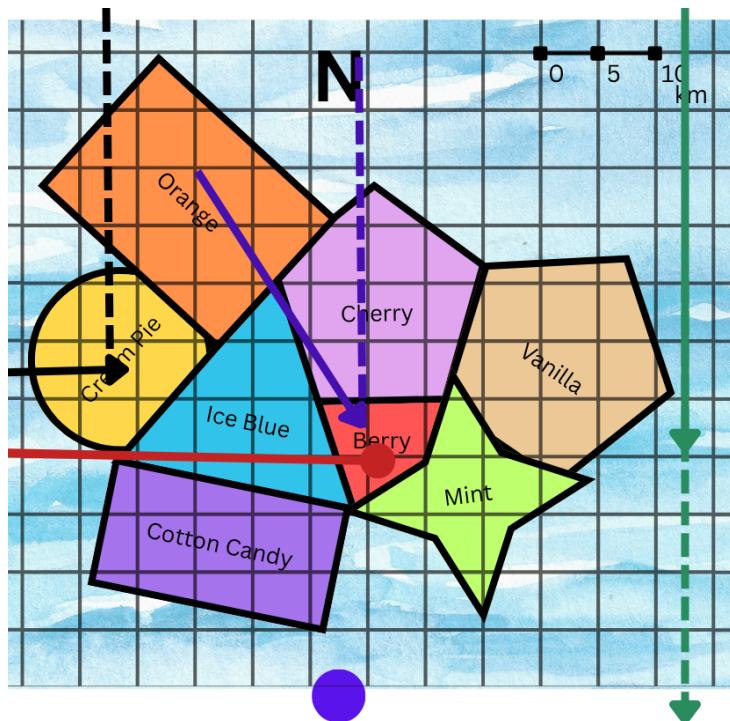
Date: _____

Exit Ticket

1

Use each color to draw the path of their flight based on the scenarios below.

- Ari is flying towards Berry Town from their landing strip in Orange Town. What direction is Ari flying? Southeast
- Ari's friend is flying towards the island from the West and will land in Berry Town at a location that is 5 km South of the Northern border.
- Ari's sister is flying South, taking photos of the eastern coast of Vanilla Town.
- Ari's brother is flying over Cream Pie Town, flying East.



2

Which of these flight paths might intersect?

Ari might cross paths with their friend in Berry Town.

Ari and Ari's brother could cross paths in Cherry Town.

Ari's sister could cross paths with everyone but Ari's friend over the ocean.

3

Choose one pair of flights with intersecting paths. Approximately how far did each plane fly before the paths intersected? How did you determine this distance?

Answers will vary. Possible answer: Ari's sister and Ari's Brother cross paths. Ari's sister travels approximately

30 kilometers, and Ari's brother travels approximately 60 kilometers. This distance was found because, according to the scale, each square is approximately 5 kilometers across.

4

Use a dotted line to show the flight adjustment(s) that could be made to avoid any collisions. List the adjustment(s) below.

Answers will vary. Possible answer:

Ari's sister can continue her trip South, and their friend can land safely in Berry Town. Ari and their brother can change course to travel North to avoid any collisions.