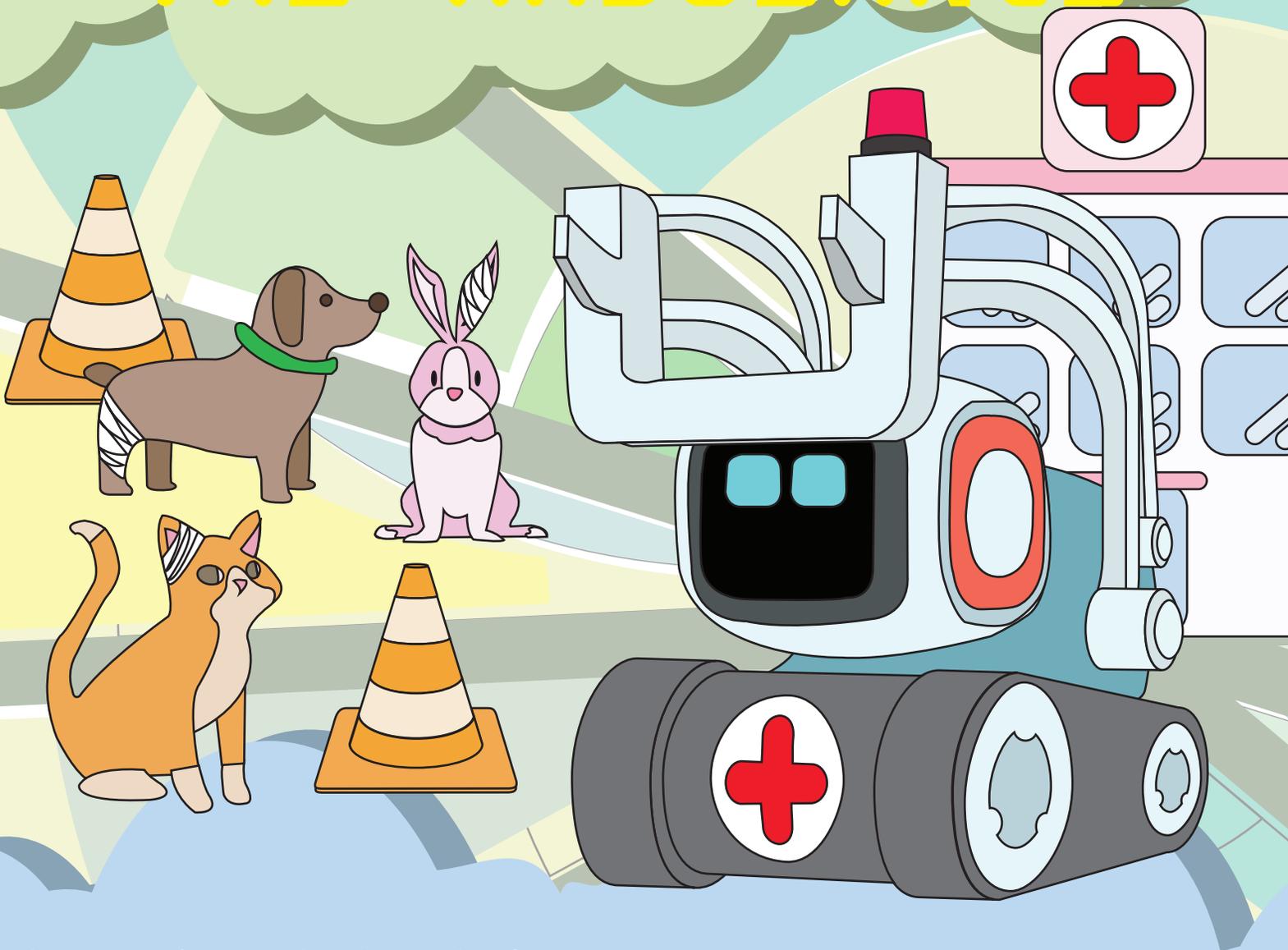


COZMO THE AMBULANCE



Cozmo is a robot ambulance.

Cozmo gives very sick and injured animals rides to the hospital. The animals must get to the hospital as soon as possible.

Cozmo needs your help! Create codes for Cozmo to quickly pick up the animals and take them to the hospital.

Materials

- iPad
- Cozmo
- Cozmo's power cubes
- Coding mat
- Character pieces
- Challenge cards 0-8
- Hospital Baskets 1 & 2
- Skinny dry erase marker
- Dry erase eraser
- Tape
- Laminator
- Scissors

Set Up

- Charge and calibrate Cozmo.
- Print out the coding mat, character pieces, hospital baskets and challenges. *NOTE: Make sure the print settings are set to print the coding mat at actual size. The mat is designed to fit the exact distance Cozmo moves.*
- Laminate the challenges.
- Cut out and laminate the character pieces.
- Tape one animal character piece to each power cube so you have a rabbit cube, a cat cube, and a dog cube.
- Cut and assemble the hospital baskets and coding mat as instructed on pages 12-17
- Tape down the coding mat on a table.

Tutorial

Challenge 0

Have children explore how Cozmo works.

Children should try to:

- Code Cozmo to move forwards, backwards, left, and right
- Code Cozmo to express different feelings and emotions.
- Code Cozmo to say a variety of words and phrases.
- Code Cozmo so that it transports the animals (power cubes with an animal picture taped to one side) to the hospital by pushing them and picking them up and carrying them. *NOTE: When transporting more than one animal, Cozmo must push one and carry one.*

Make sure children notice:



Cozmo must move twice in a particular direction to completely move into a square. Cozmo's first move will align its arm with the yellow dashes and its second move will align its arm to the next black line.

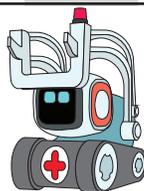
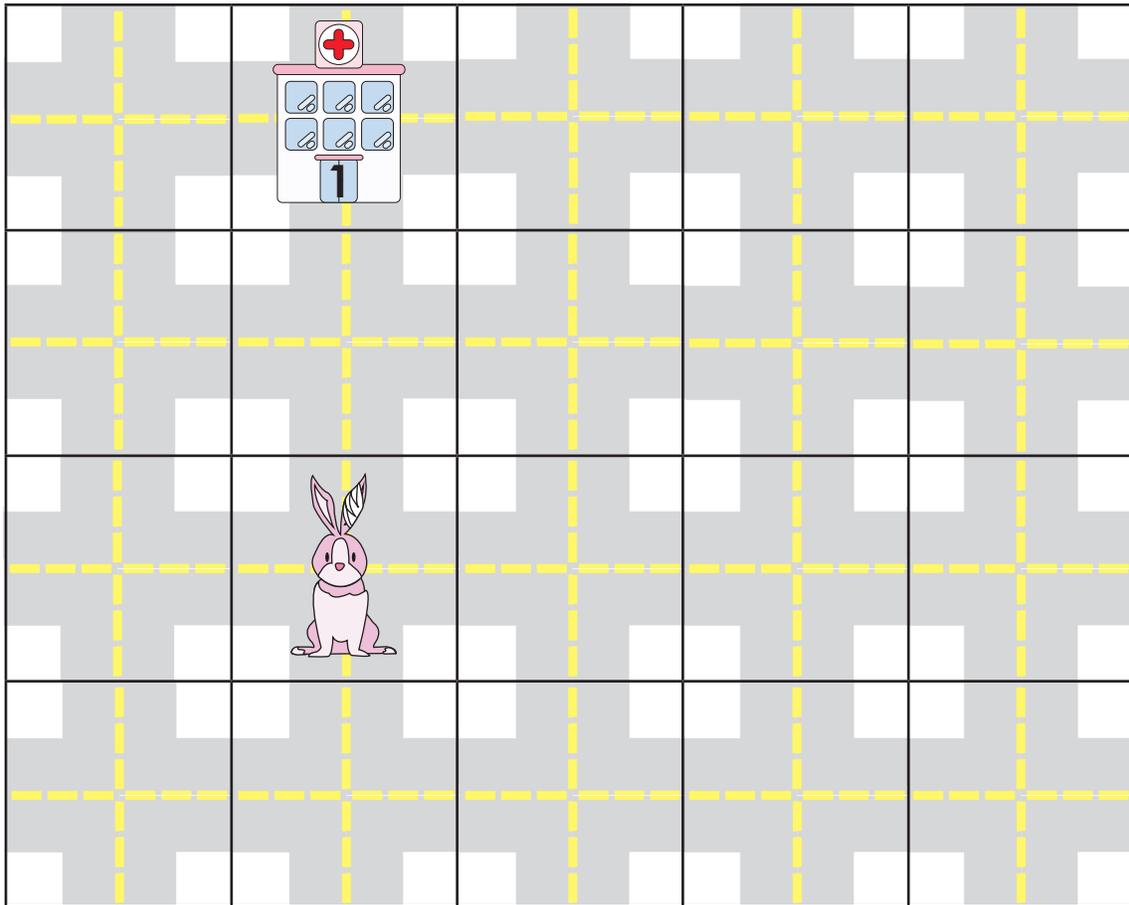
Challenges 1-8

Children should:

- Read the challenge.
- Create a plan. They may wish to use the dry erase marker to model their ideas on the map provided on the challenge card.
- Use the map to place the animal cube(s), cone(s), hospital basket(s) and Cozmo on the coding mat. *NOTE: Cozmo's arm must be aligned to the front line on the mat.*
- Enter their code into the app.
- Test their code.
- Debug and improve their plan (if needed).
- Share their solution with at least one other person.

Challenge 0

1. Learn how Cozmo works. How can you make Cozmo move forward, backward, to the left, and to the right?
2. Code Cozmo so it pushes the rabbit to the hospital.
3. Code Cozmo so it picks up the rabbit and carries it to the hospital.
4. Can you code Cozmo so it acts happy? Sad? Excited? Frustrated? What other feelings or emotions can you make it show?
5. Can you code Cozmo to say hi? What other words or phrases might Cozmo say to a sick or injured animal? Code Cozmo to go and say your word or phrase to the rabbit.

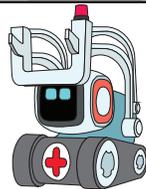
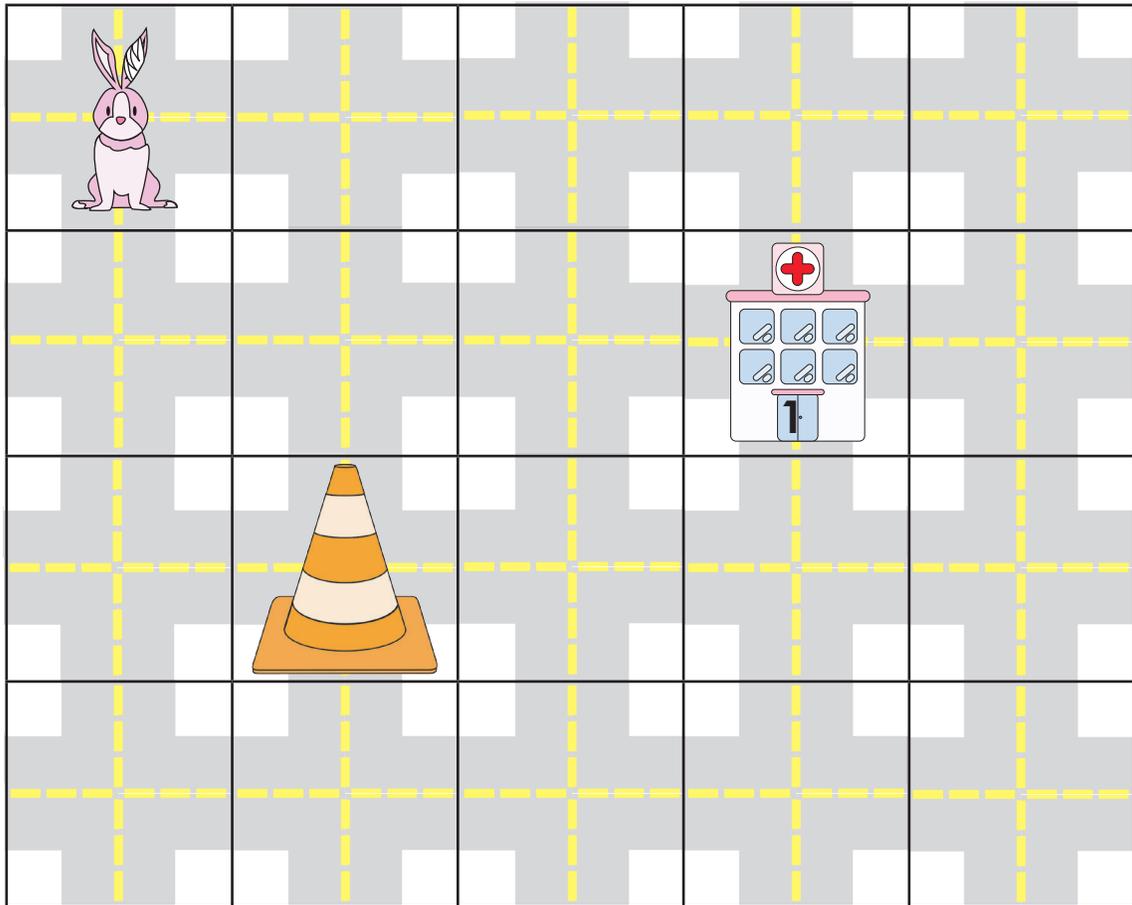


Challenge 1

The little rabbit is very sick. The rabbit needs help getting to the hospital.

Create a code for Cozmo to:

- Pick up the rabbit and take it to the hospital.

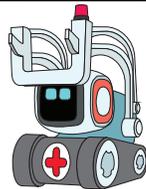
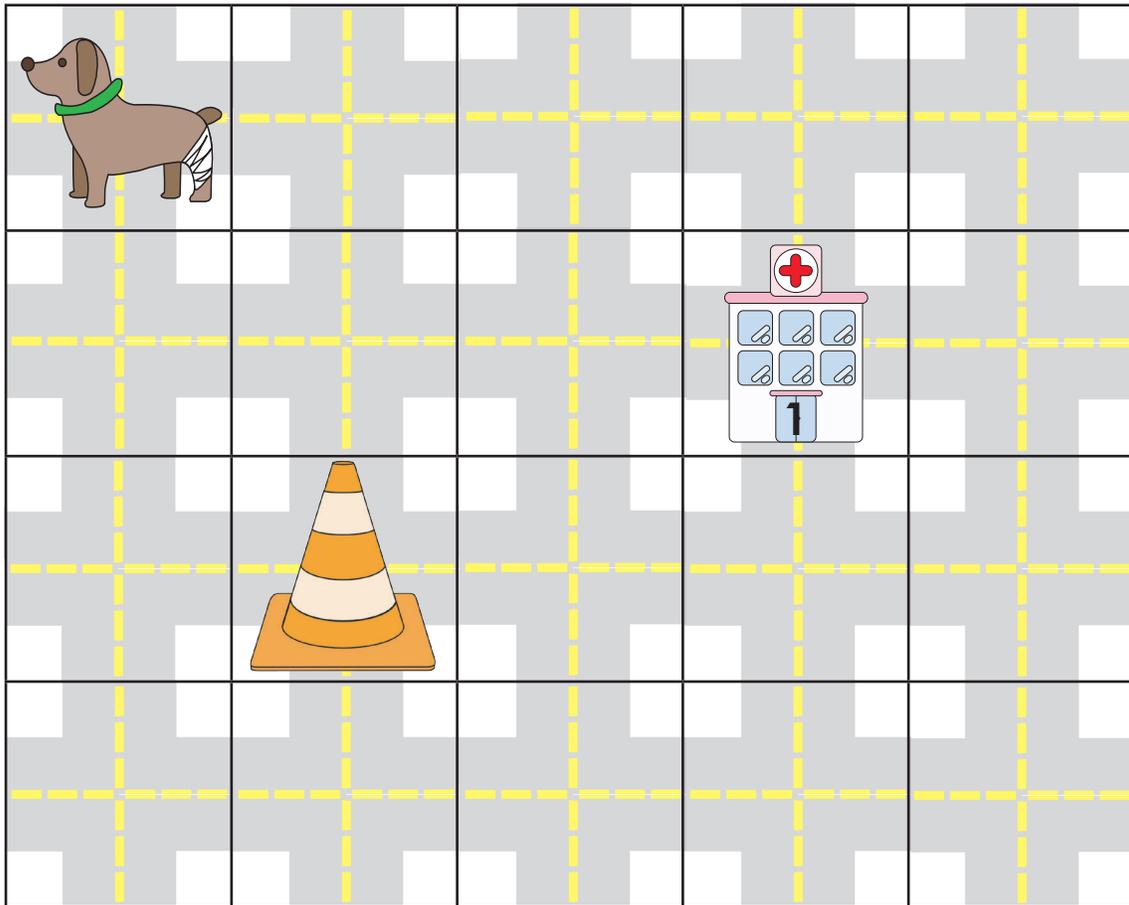


Challenge 2

The dog is injured. The dog needs help getting to the hospital.

Create a code for Cozmo to:

- Greet the dog by saying "hi".
- Pick up the dog and take it to the hospital.
- Show its excitement for helping the dog.

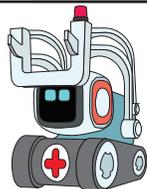
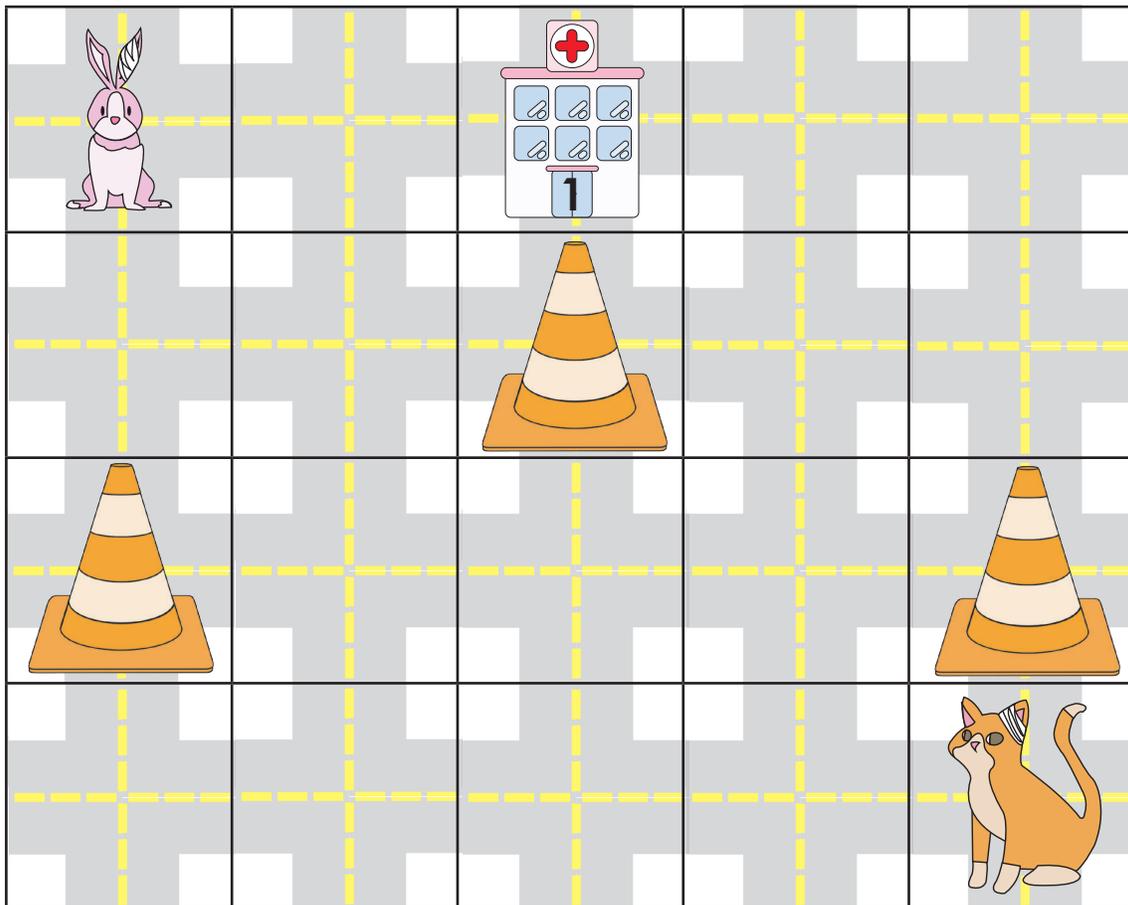


Challenge 3

The rabbit and cat are very sick. They need help getting to the hospital. The robot ambulance has space for two animals to ride at a time.

Create a code for Cozmo to do:

- Pick up the animals and take them to the hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".

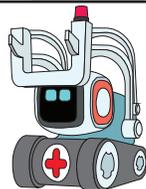
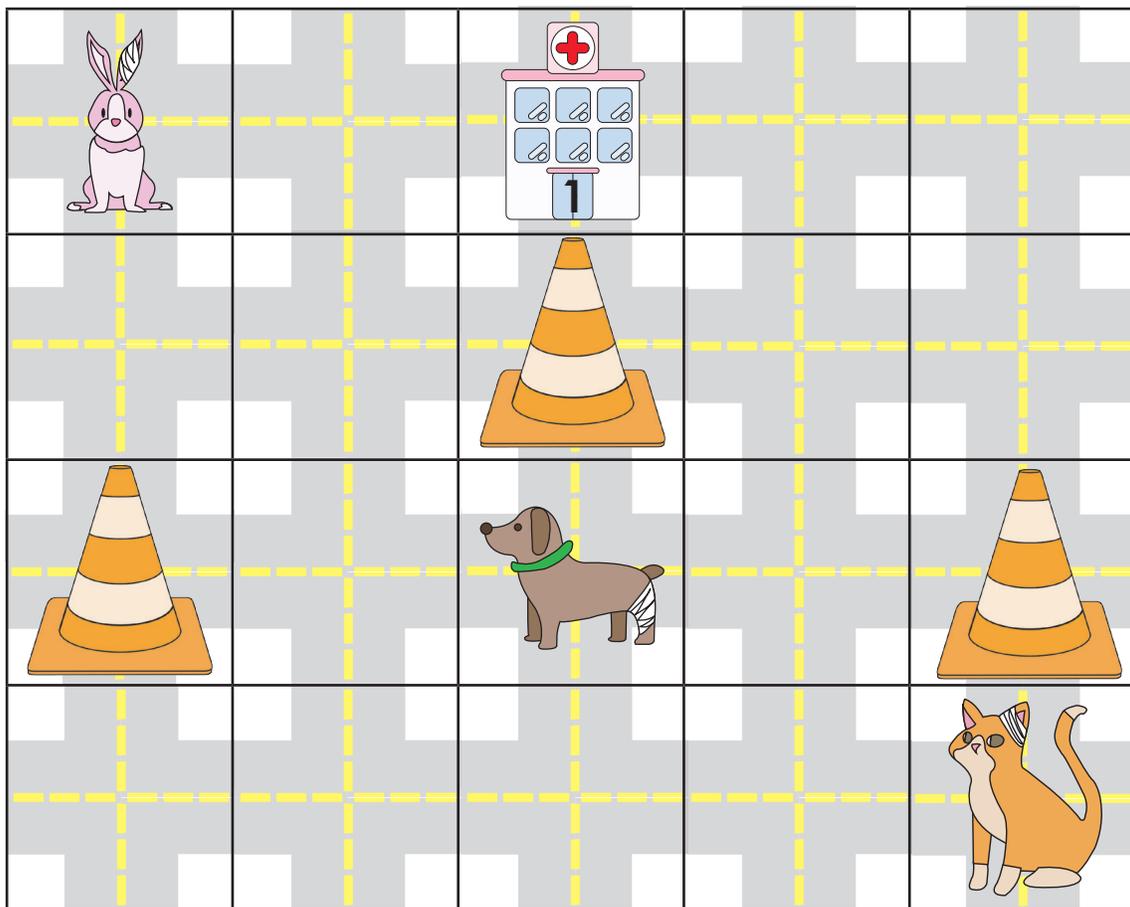


Challenge 4

The dog, rabbit, and cat all need help getting to the hospital. The robot ambulance has space for two animals to ride at a time.

Create a code for Cozmo to:

- Pick up the animals and take them to the hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".

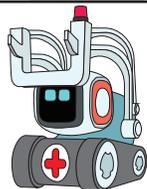
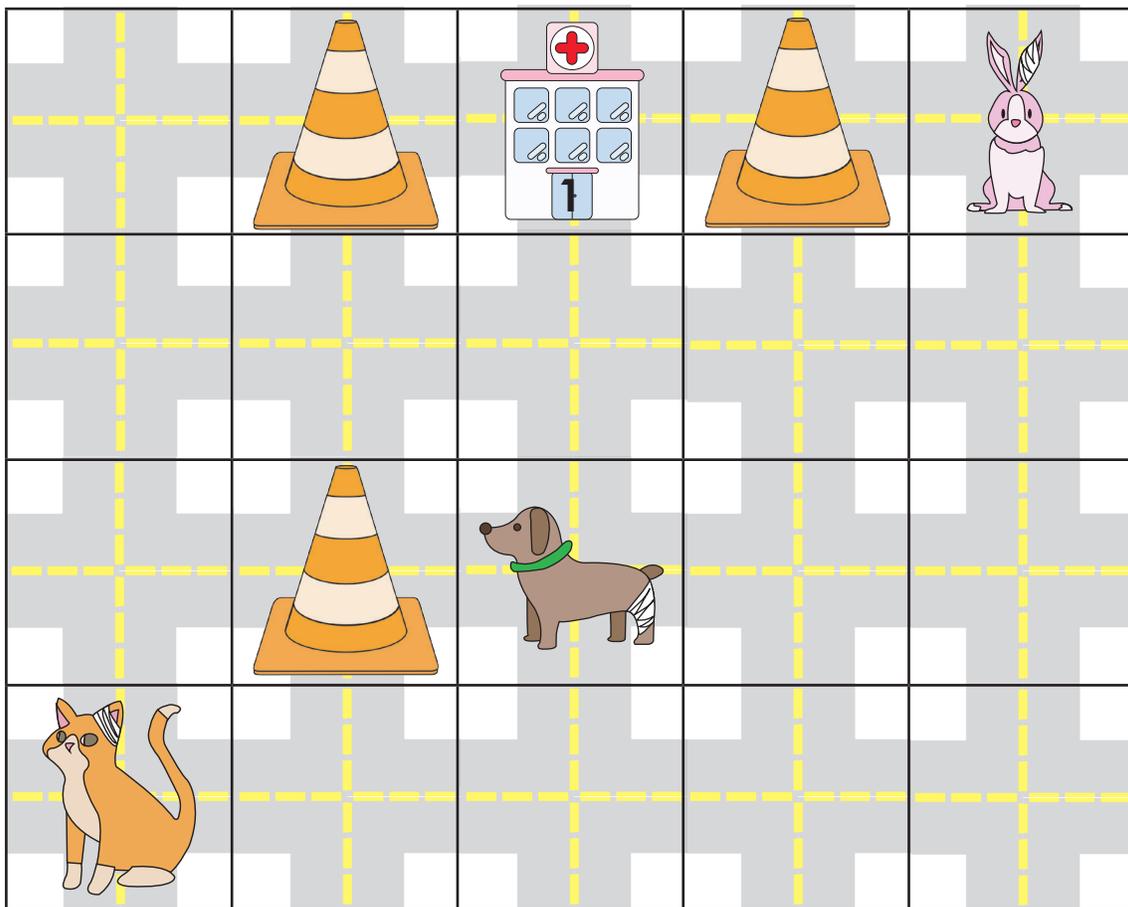


Challenge 5

The dog, rabbit, and cat all need help getting to the hospital. The robot ambulance has space for two animals to ride at a time.

Create a code for Cozmo to:

- Pick up the animals and take them to the hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".

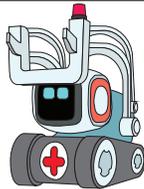
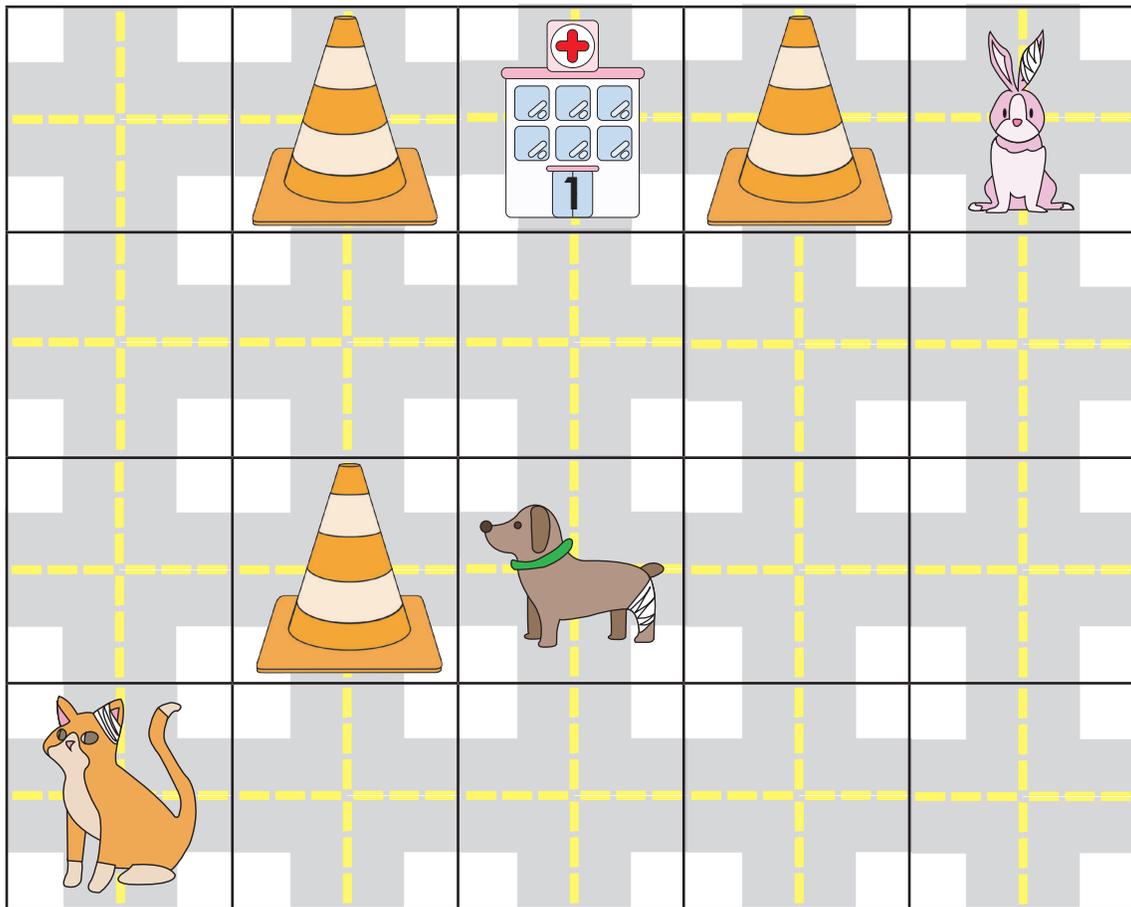


Challenge 6

The dog, rabbit, and cat all need help getting to the hospital. The robot ambulance has space for two animals to ride at a time. The dog does not get along with the cat.

Create a code for Cozmo to do:

- Pick up the animals and take them to the hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".

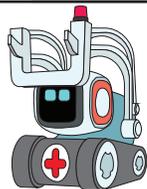
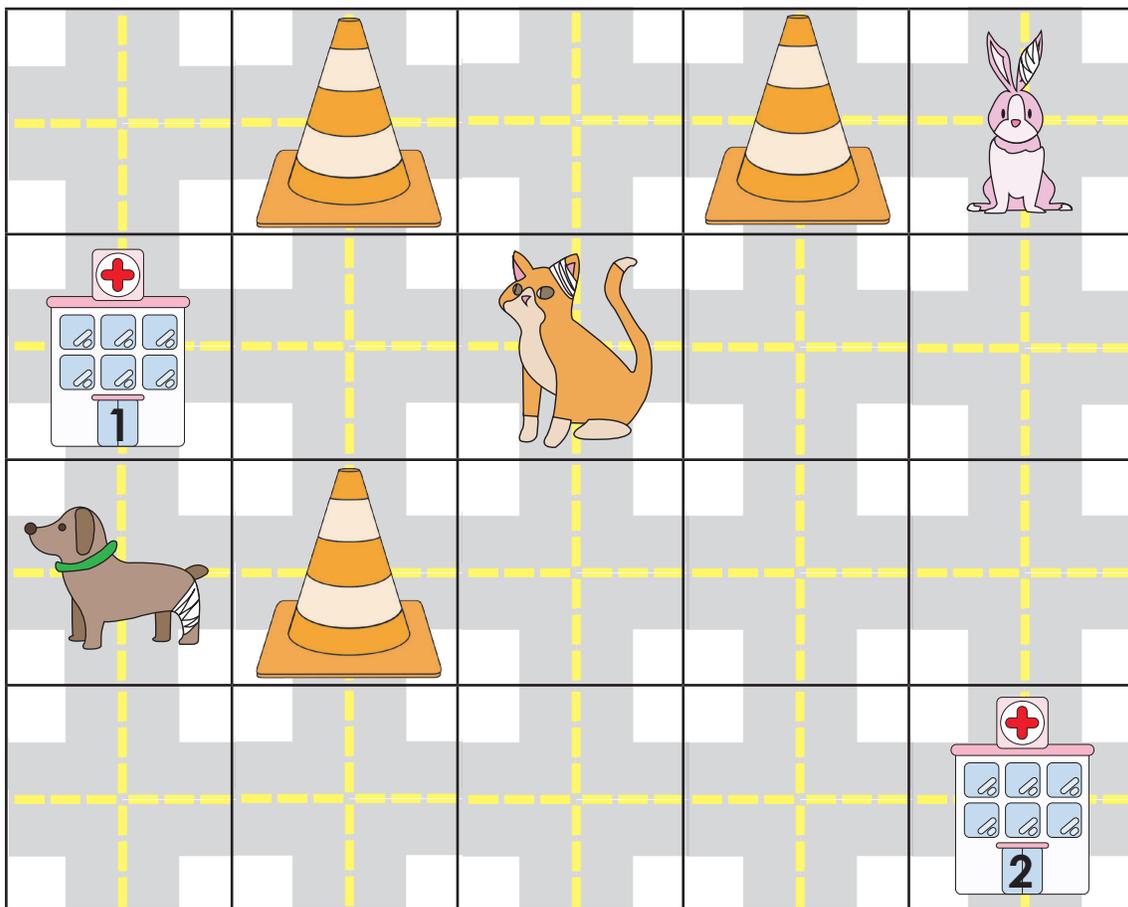


Challenge 7

The dog, rabbit, and cat all need help getting to the hospital.
There are two hospitals in their city.

Create a code for Cozmo to:

- Pick up the animals and take them to a hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".

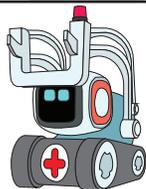
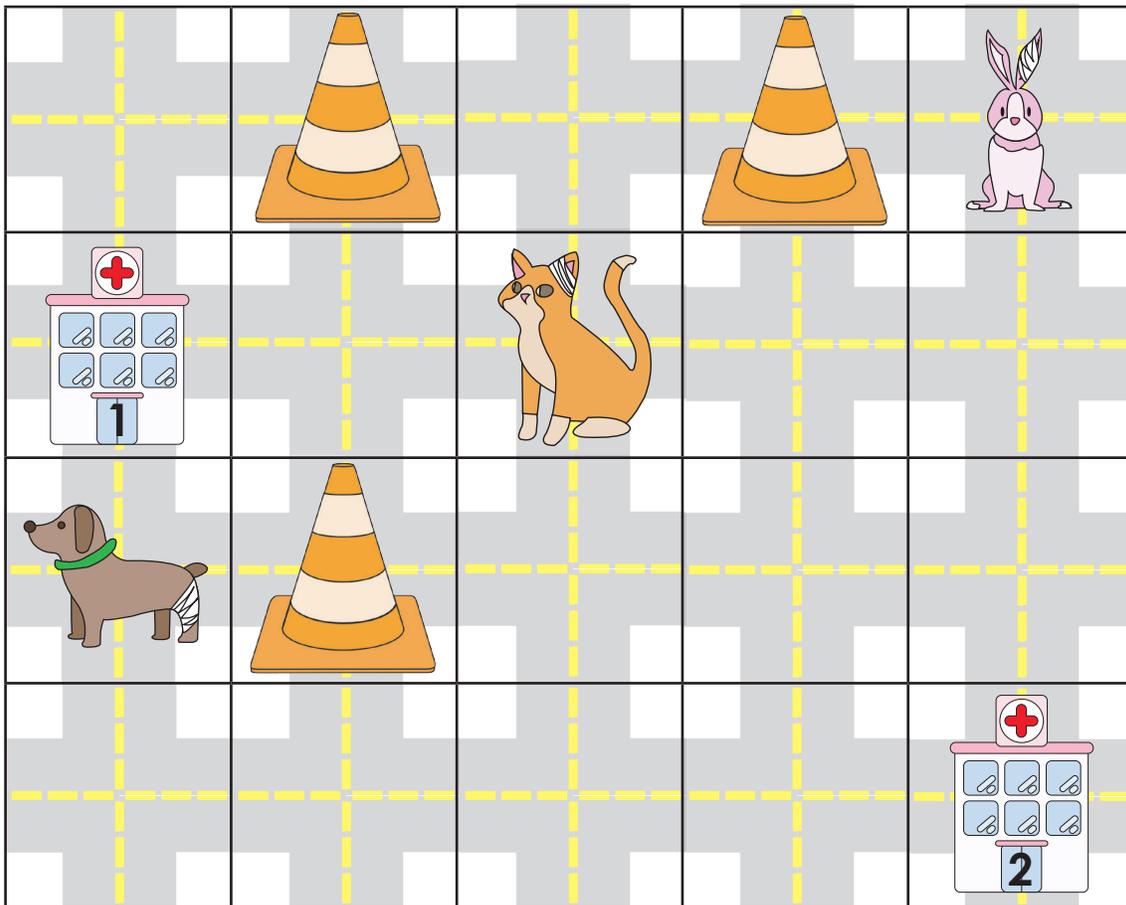


Challenge 8

The dog, rabbit, and cat all need help getting to the hospital. Their are two hospitals in their city. Hospital 1 only accepts cats and rabbits. Hospital 2 accepts all pets.

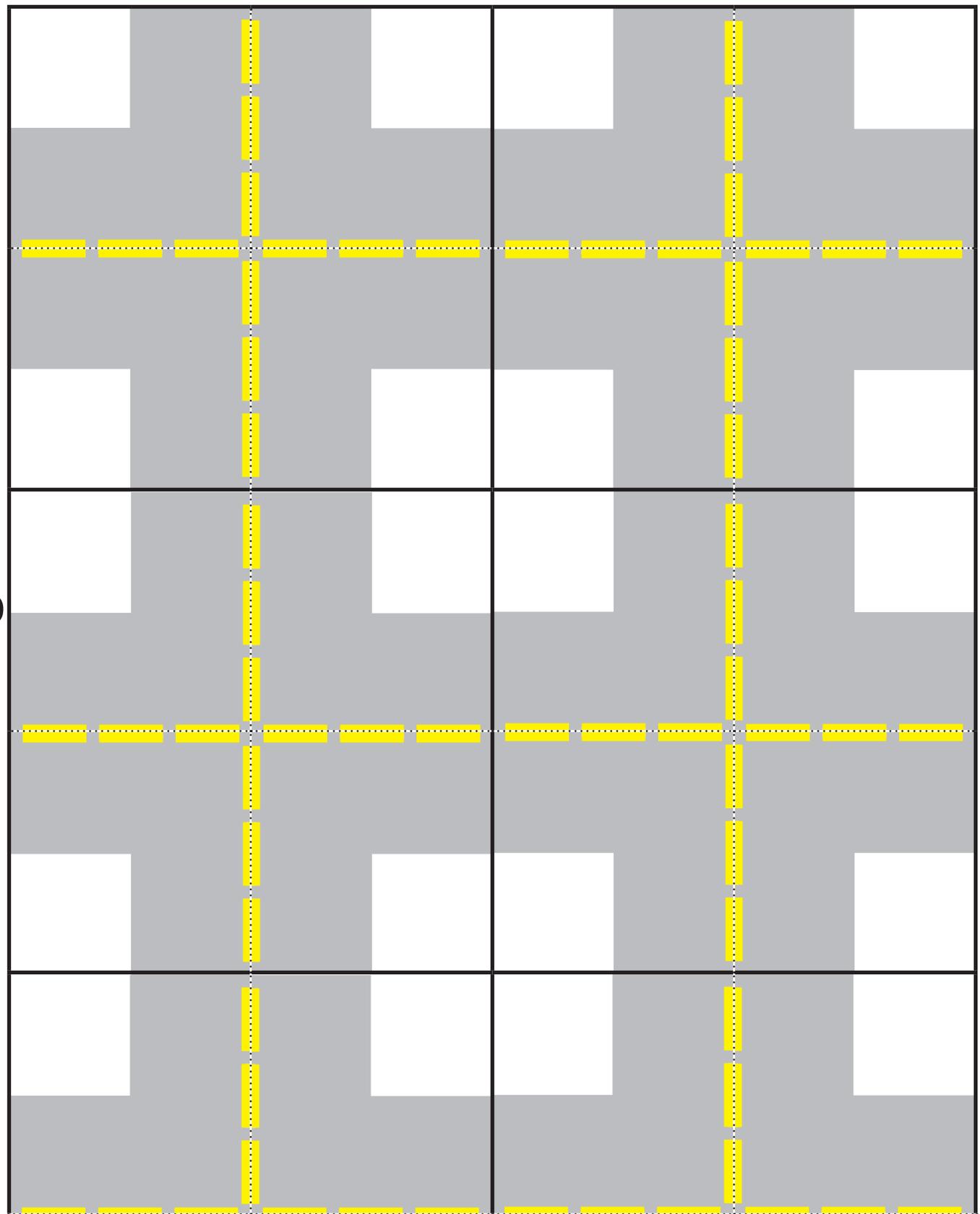
Create a code for Cozmo to:

- Pick up the animals and take them to a hospital.
NOTE: Cozmo can pick up and drop off the animals one at a time or take two animals at the same time.
- Greet the animals by saying "hi".





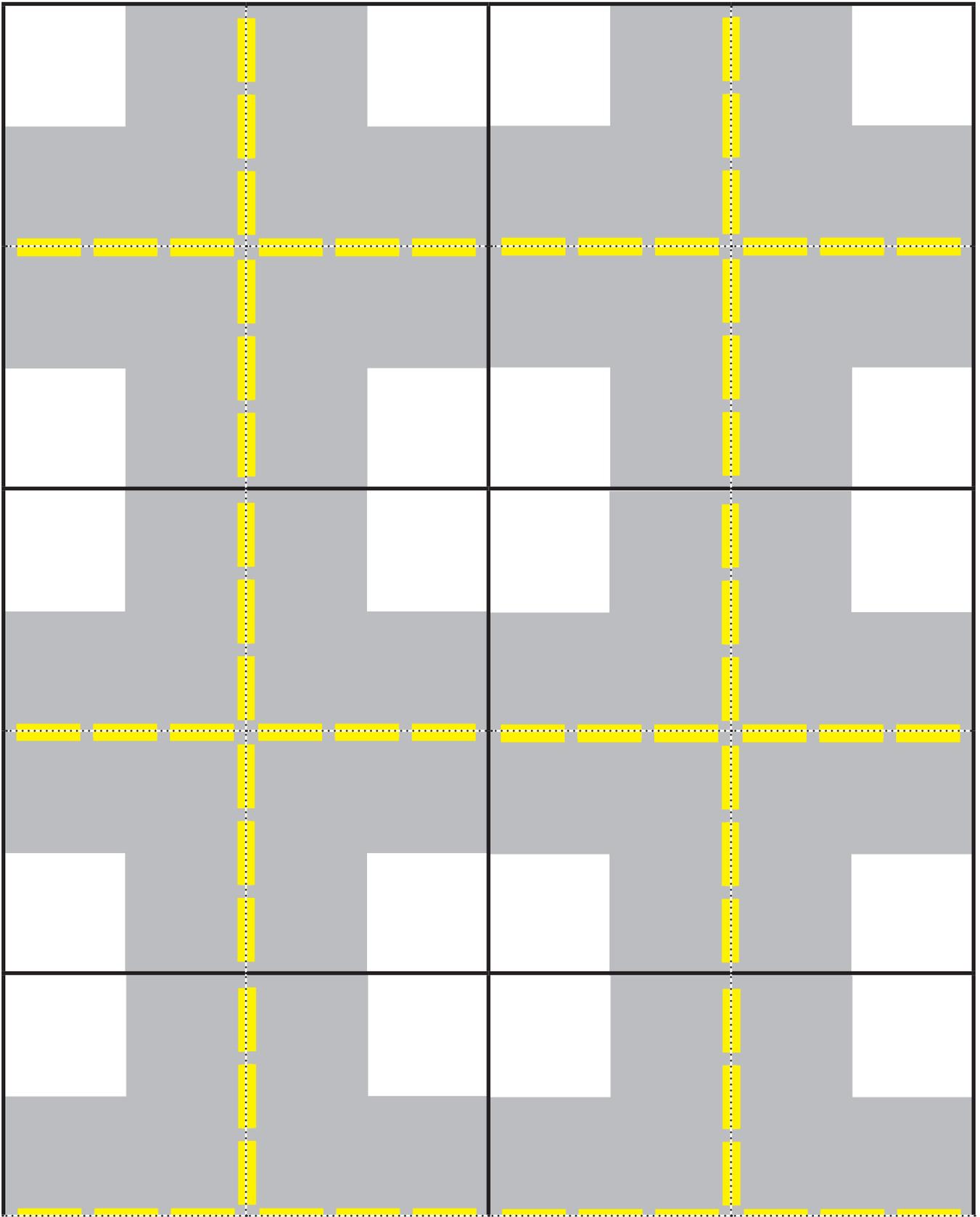
Coding Mat



B

A

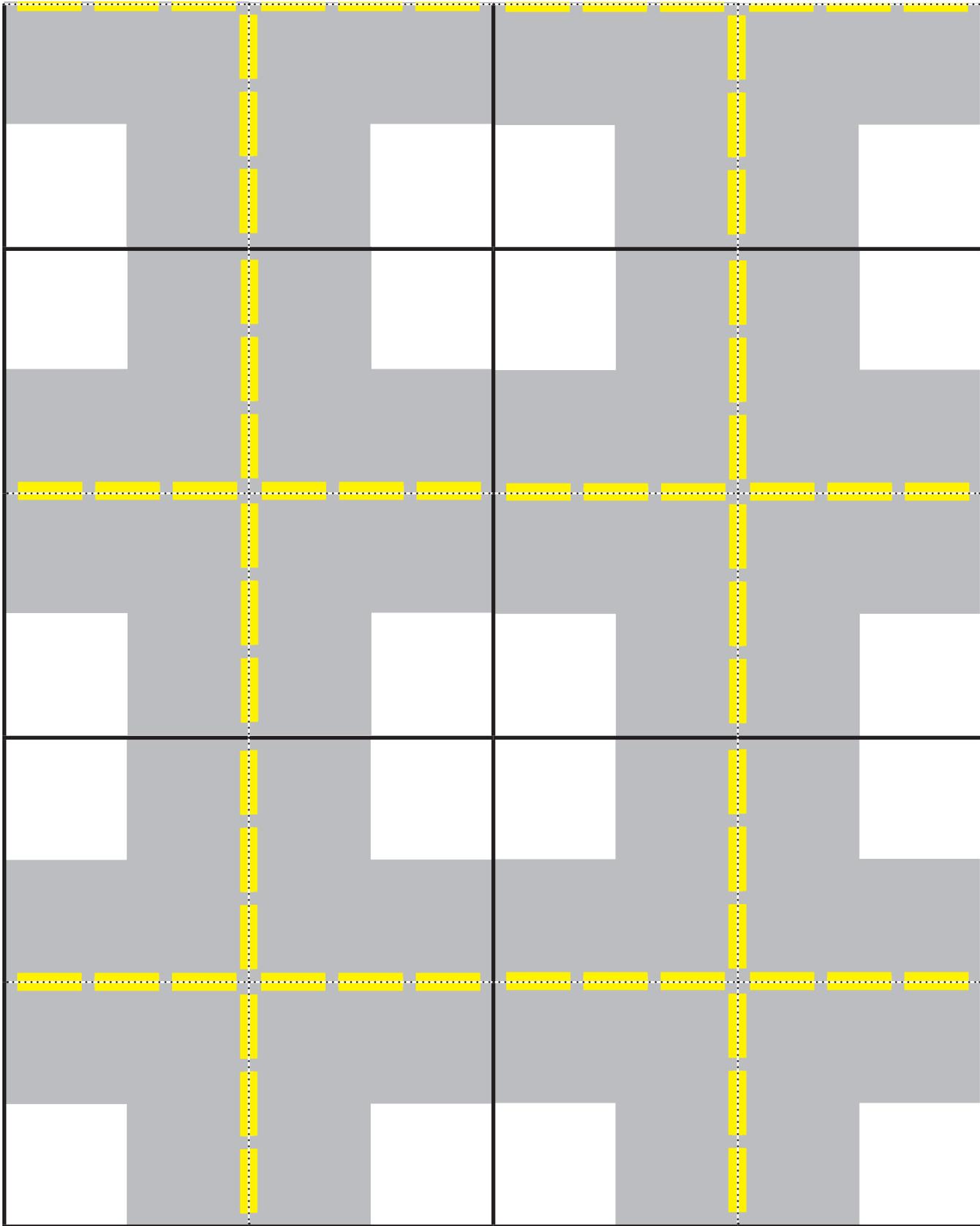




B

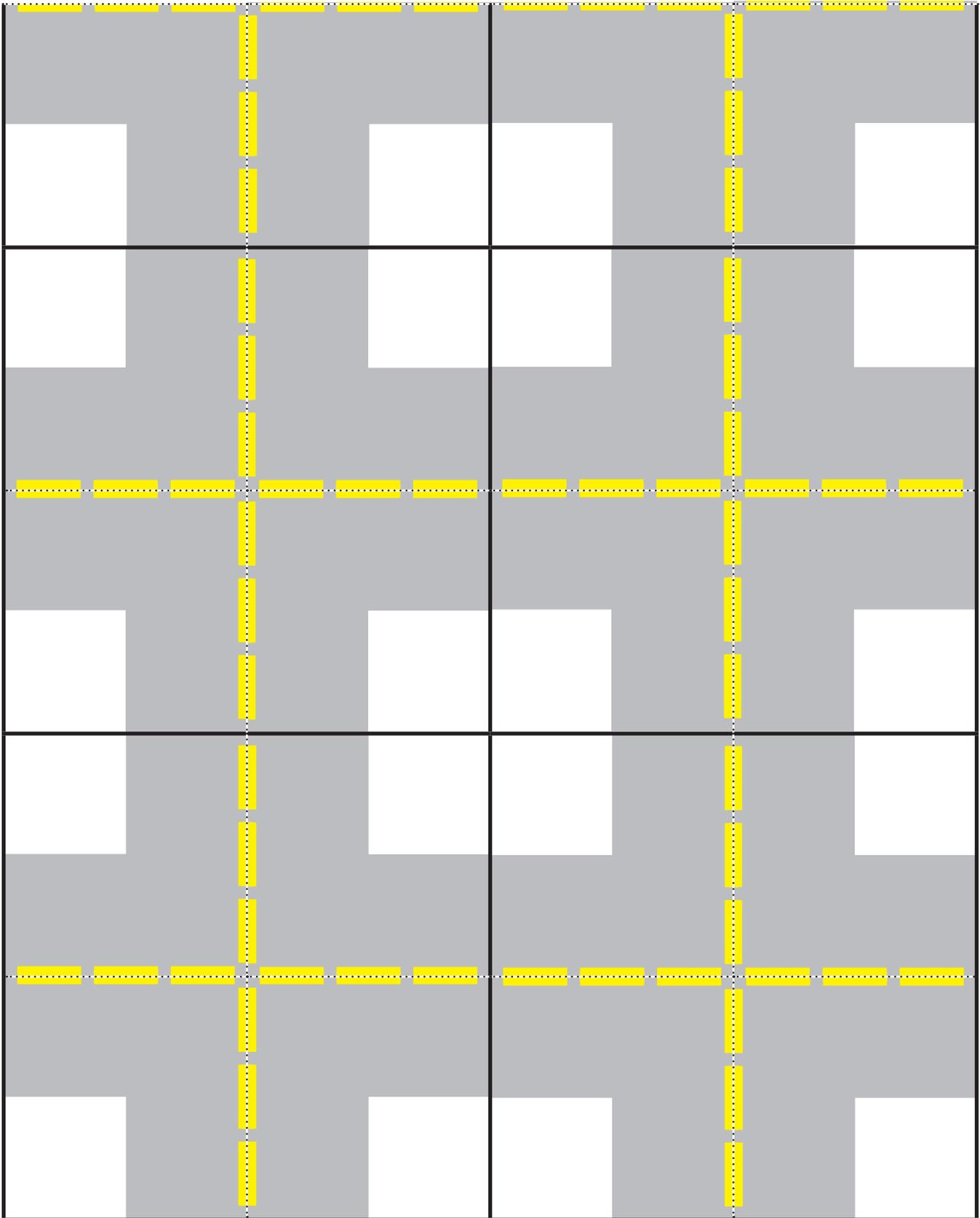
C

A



D

C



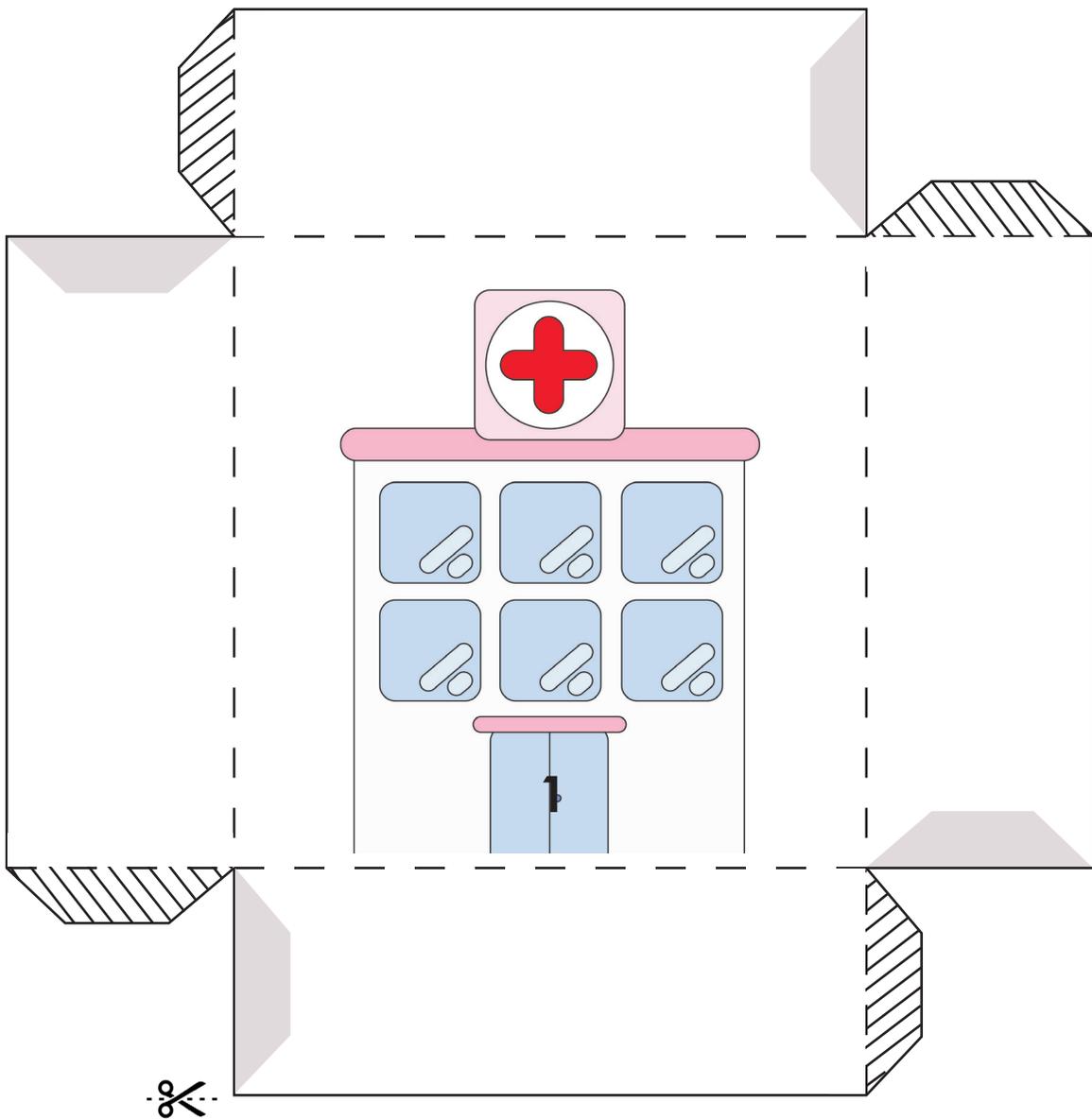
D

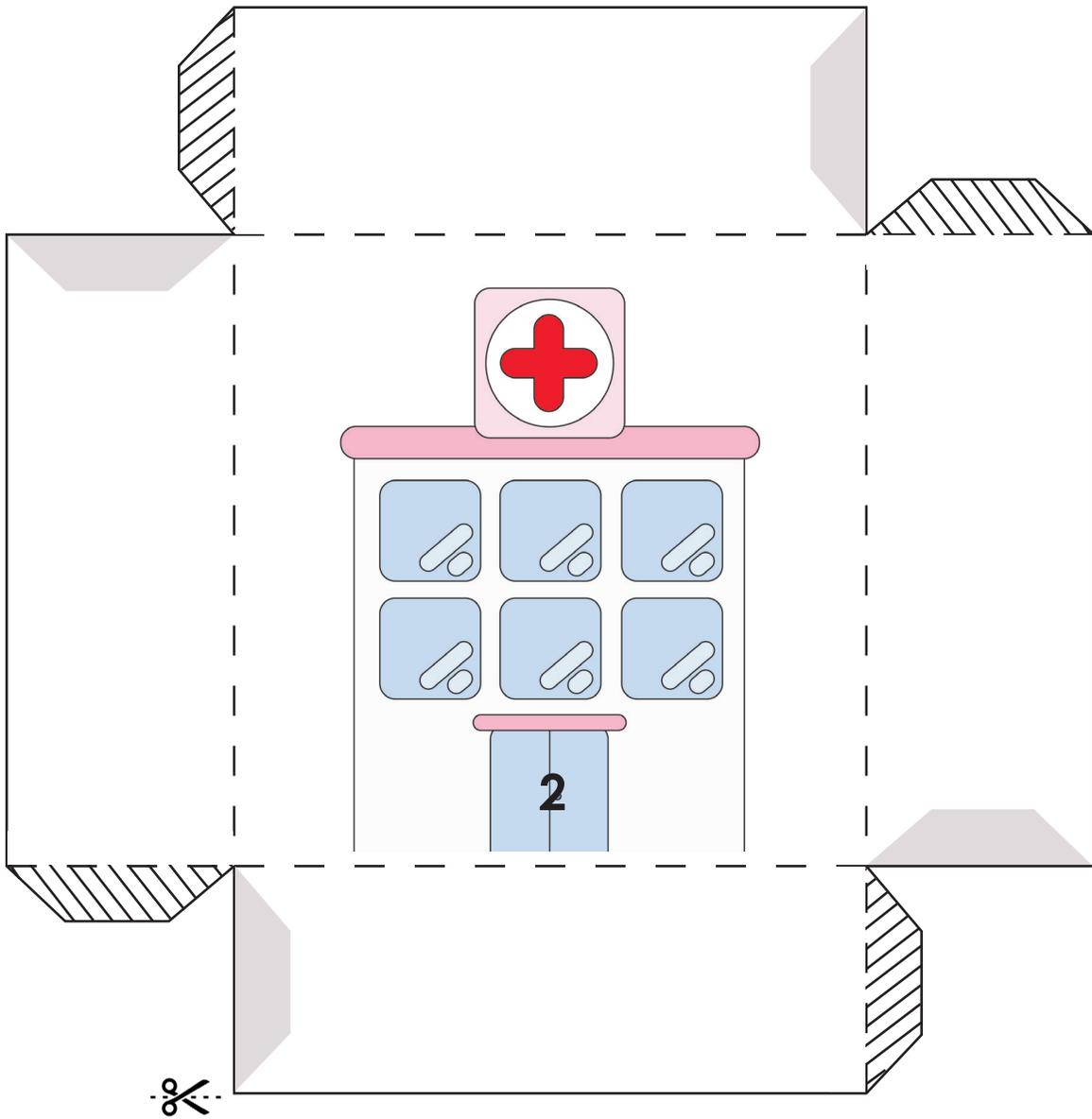


Hospital Baskets

Create the hospital baskets using the instructions below.

- Cut solid lines.
- Fold dashed lines.
- Glue/tape wings to the sides.





Character Pieces

