

MAY & SUMMER BOT BASICS

SIMPLE ROBOTICS CHALLENGES FOR BEGINNERS

ROAD TRIP

- 1) Arrange the "B" landmark picture cards on the floor on top of a large United States map (optional). Place the landmark word cards facedown in a stack.
- 2) Flip over the top "A" landmark word card and program your robot to move to the "B" landmark picture.



BOT BASEBALL

- 1) Use masking tape to tape a baseball diamond on the floor. Tape the bases on each corner.



GONE FISHING

- 1) Tape a paper fishing rod to your robot. Tape a fish to a glue stick.



CRITTER HIDE & SEEK

- 1) This station is played similar to "Memory." First, hide the "B" critter cards underneath cups and arrange



CAMPING TRIP

- 1) Create a path or maze with straight edges. You may use wooden planks, popsicle sticks, base ten rods, or construction paper.
- 2) Put the KIDS at the maze and TENT at the end.



DOCK THE BOAT

- 1) Use construction paper and tape to make your robot look like a boat! (You may decorate a large cup for sphere-shaped robots.)
- 2) Build 2-4 different "boat slips" on the floor out of base ten rods that are large enough to fit your robot. Face them in different directions.
- 3) Program your robot to move inside one
- 4) C



PACK YOUR SUITCASE

- 1) Tape the objects to the front of mini cups and spread them out on a small box or "suitcase."

robot to push objects into the suitcase.
position of the object for your robot to pack

BUCKETS OF BASIC FACTS

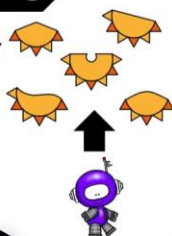
Connect the bucket mats with tape to make a large grid.



Roll two dice. Add the numbers together, then

SUNNY DAYS

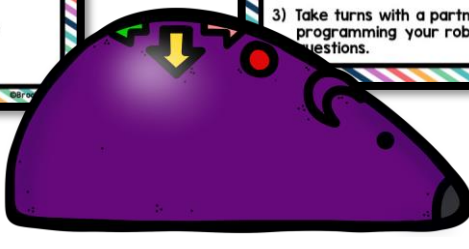
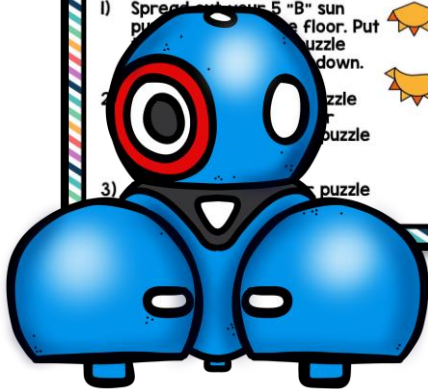
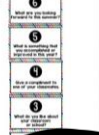
- 1) Spread out your 5 "B" sun puzzle pieces on the floor. Put the puzzle pieces facedown.
- 2) Flip over the top puzzle piece and program your robot to move to the position of the object.
- 3) Flip over the next puzzle piece and program your robot to move to the position of the object.



MEMORY LANE

This station should be completed with a partner.

- 1) Tape the Memory Lane mats together on the floor.
- 2) Roll a die and program your robot to move to the matching number. Answer the question that your robot lands on.
- 3) Take turns with a partner rolling the die, programming your robot, and answering the questions.



10 SIMPLE SUMMER THEMED ROBOT CHALLENGES FOR BEGINNERS

BOT BASEBALL

- Use masking tape to tape a baseball diamond on the floor. Tape the bases on each corner.
- Start your robot at home base. Roll the die. Program your robot to move around the diamond based on the following chart:

1	First Base
2	Second Base
3	Third Base
4	Home Run
5	Strike - Roll again
6	Walk - Go to First Base

BOT BASEBALL

Tape the bases on the corners of the baseball diamond.

FIRST BASE	SECOND BASE
THIRD BASE	HOME PLATE
FIRST BASE	SECOND BASE
THIRD BASE	HOME PLATE

GONE FISHING

Tape the fish to the front of glue sticks. Tape the fishing rods to the robots.

GONE FISHING

- Tape a paper fishing rod to your robot. Tape a fish to a glue stick.
- Program your robot to move forward to touch the glue stick and "catch the fish," then move backward to you.
- Change the distance of the glue stick and program your robot again.

PACK YOUR SUITCASE

Tape the objects to the front of mini cups.

PACK YOUR SUITCASE

- Tape the objects to the front of mini cups and spread them out on the floor. Prop up a small box nearby to be your "suitcase."
- Program your robot to push all of the objects into the suitcase.
- Change the position of the objects and program your robot to pack them again.

2

What is something new that you learned this year?

1

What is one of your favorite memories from this school year?

6

What are you looking forward to this summer?

5

What is something that you accomplished or improved in this year?

DOCK THE BOAT

- Use construction paper and tape to make your robot look like a boat! (You may decorate a large cup for sphere-shaped robots.)
- Build 2-4 different "boat slips" on the floor out of base ten rods that are large enough to fit your robot. Face them in different directions.
- Program your robot to move inside one of the boat slips.
- Choose a different boat slip and program your robot again.

4

Give a compliment to one of your classmates.

3

What do you like about your classroom or school?

MEMORY LANE

This station should be completed with a partner.

- Tape the Memory Lane mats together on the floor.
- Roll a die and program your robot to move to the matching number. Answer the question that your robot lands on.
- Take turns with a partner rolling the die, programming your robot, and answering questions.

USE WITH ANY DRIVING BOT!

10 SIMPLE SUMMER THEMED ROBOT CHALLENGES FOR BEGINNERS

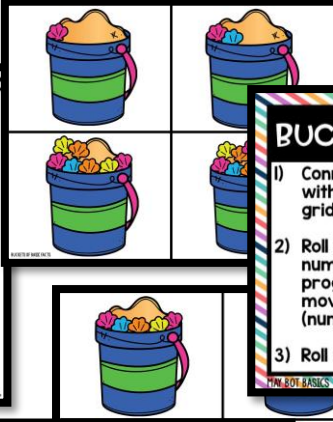
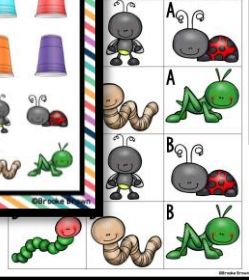
CRITTER HIDE & SEEK

- 1) This station is played similar to "Memory." First, hide the "B" critter cards underneath cups and arrange the cups in rows. Spread out the "A" critter cards and place them face-down.
- 2) Flip over any "A" card and program your robot to move and touch any cup. Lift the cup to see if the critter cards match. If they don't, leave the cards. If they do, keep the cards. If they don't, leave the "B" card under the cup and flip the "A" card back over.
- 3) Repeat until all matches are found.



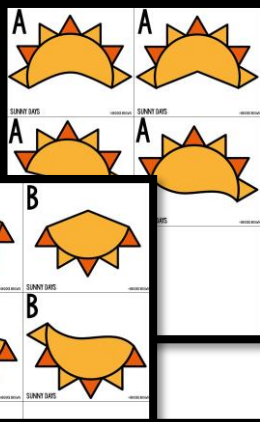
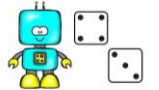
HIDE AND SEEK

Place "A" cards underneath cups and the cups in rows. Place "B" cards face-down on the floor.



BUCKETS OF BASIC FACTS

- 1) Connect the bucket mats with tape to make a large grid.
- 2) Roll two dice. Add the numbers together, then program your robot to move to the matching sum (number of shells).
- 3) Roll again and repeat.



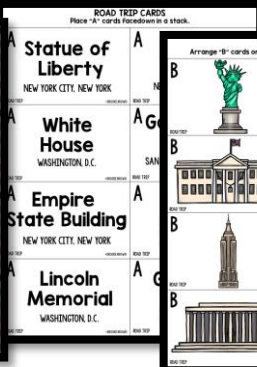
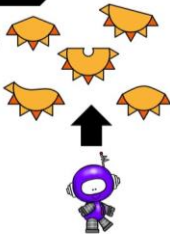
CAMPING TRIP

- 1) Create a path or maze with straight edges. You may use wooden planks, popsicle sticks, base ten rods, or construction paper to make your maze.
- 2) Put the KIDS at the beginning of your maze and TENT at the end. Put the CAMPING GEAR along the path.
- 3) Program your robot to move from the KIDS to the TENT and collect all the CAMPING GEAR along the way. Try to use only ONE sequence of code.



SUNNY DAYS

- 1) Spread out your 5 "B" sun puzzle pieces on the floor. Put the other 5 "A" sun puzzle pieces in a stack face-down.
- 2) Flip over the top "A" puzzle piece and program your robot to the matching puzzle piece.
- 3) Repeat with the other puzzle pieces in the stack.



ROAD TRIP

- 1) Arrange the "B" landmark picture cards on the floor on top of a large United States map (optional). Place the "A" landmark word cards face-down in a stack.
- 2) Flip over the top "A" landmark word card and program your robot to move to the matching "B" landmark picture.
- 3) Repeat with all the cards in the stack.



USE WITH ANY DRIVING BOT!