Hosting a Robot Party

It is always a good time for a robot party. Dash is a big party animal and loves preparing for a good gathering. We are sharing with you our tips for hosting a robot party of your own with good friends old and new.

1. Find a place to party. You’ll need a place that fits a small group of people. Keep it simple! Try hosting it at your house, your school, a community center! Make sure there are a few props and toys around to use with your robots. You can also host a virtual party through zoom or other video conferencing tools. Be sure to ask an adult first.

2. Create an event! Know friends, classmates, or others who love Dash & Dot? Invite them over or send them a link to your video chat!

3. Prepare a project for show and tell. The best part of a robot party is that you get to learn about cool things from one another! Tell everyone with a robot to bring a project to share and any props or toys they want to use with their robots during the main event!
What we did

10am - Arrive at the party headquarters in person or through video!

10am - 10:10am - Do an icebreaker to learn everyone’s name and a fact about them. We played Hot Potato to break the ice. If you are online, it could simply be sharing the names of your robots.

10:10 - 10:30am - Show and tell! Everyone got a chance to show something cool they made with their Dash & Dot.

10:30 - 10:45am - A snack and social break. We talked with one another, and some people shared the code behind their projects. Don’t forget you can share your program keys with one another.

10:45 - 11am - Play a group game with your robots. Don’t have any? Don’t worry, check out some activities at play.makewonder.com.

11am - 11:45am - In groups of 2-4 people, collaborate on a project to work on together with your robots. You can learn a new coding trick, make up a game for others to play, or create a performance!

At our party, some groups made a music video, others put on a puppet show, and yet others created a set of towers to knock down. What awesome projects can you make up together?

11:45 - 12pm - Share with parents and the rest of the party! Be sure to tweet or post your projects with #makewonder to share with the rest of the world!
Reinvent this playground favorite with Dot to add some surprise and delight into the mix! First program Dot to be the Duck Duck Goose picker. Once everyone is sitting in a circle, go around to pick the Goose with Dot, and take cover when the Goose starts to chase! Use standard rules, or make up your own!

*COVID modifications: This activity can be modified by having 6ft of distance between participants and/or fewer participants.
Set up

1. Program your picker using Dot and the Blockly app. Check out our sample code! Choose one sound to represent the “duck” and another sound to represent the “goose”.

   We chose the Cat sound to represent a Duck and the Lion sound to represent the Goose. The picker needs to press the top button as they pass each person in the circle.

   We designed the game to say Duck **6 times** before getting to the Goose in the first round and then **4 times** before getting to the Goose during the second round. You should create about 10 rounds with different numbers, and then you can put a repeat loop around the entire game to keep it going!

   Add some lights to put in some special effects!

2. You’re ready to play! **With a couple friends or family members**, have them sit in a circle. Make sure you have enough room to run around!

3. **Explain your program and the rules** to everyone. You can also modify the game to include a mosh pit! If the Picker gets caught by the Goose, they have to sit in the center of the circle.

4. It’s game time! Time to have fun!
Turn Dash into a dump truck so you can drop off some toys, give a tasty treat to a friend, or clean up your room. These building instructions help you build your bot, and then it’s your turn to program Dash and bring your truck to life!

**What you’ll Need:**

- Dash
- 2 Building Brick Extensions
- The LEGO® Compact Tracked Loader set!
Set up

1. Build your dump truck attachment with the **Compact Tracked Loader set** and two Building Brick Extensions. [Detailed building instructions here.](#)

2. Attach the **Building Brick Extensions** to the left side of Dash’s head and back. Check out this photo to get the right fit.

3. Create your program in Blockly. Every time Dash’s head turns **30 degrees left**, the dump truck dumps! What can you use Dash’s dump truck for?

![Program diagram](image)

Now what will you do with your dump truck? Deliver a note to a friend, carefully drop hot lava into a volcano, or go nuts like we did! We can’t wait to see your creations. Ask an adult post to YouTube or social media with **#makewonder**.

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Learn more about our educator resources at: [makewonder.com](http://makewonder.com)
Quick, pass the potato! Turn Dot into a ticking time bomb and then pass Dot around. If the fire siren starts going off when the potato gets to you, you are out! We love playing when not everyone knows each other as an ice breaker. The person who gets out has to say their name and a fact about themselves.

What you’ll Need:

- Dot
- A couple of your friends or family members*

*COVID modifications: This activity can be modified by having 6ft of distance between participants and/or fewer participants.
Set up

1. Program your hot potato using Dot and the Blockly app. Check out our sample code! How do you want your hot potato to work? We like to start out slow and then go faster towards the end of the game.

You can pass the potato and program it to ring after a certain period of time. In this case, we have the potato going for about **8 seconds** and then **5 seconds** before it rings (hint: each light block takes 0.25 seconds to run). Match the number of rounds to the number of friends you have!

You can also program it to ring after a certain number of tosses if you want to **toss the potato**! Be careful to not hurt yourself if you plan on doing that!

Add some colors and flair to Dot as your potato goes around!

2. You’re ready to play! Have everyone sit in a circle. It’s time to pass (or toss) the potato!

3. Explain your program and the rules to everyone. Pass the potato, and the person it stops at is out! If you are using this game as an ice breaker, have the person say their name and something about themselves before they get out! Of course you can also add your own rules.

4. It’s game time! Ask an adult to share a video of the game in action and tag us #makewonder!
Red rover, red rover send Dash right over! Challenge your friends or family members to this robot version of Red Rover! Sit in a circle or parallel rows and then pass Dash back and forth using Blockly or Path to create your own robot algorithm. The closer you get to your goal, the more points you will earn. Make it harder by using more than 1 Dash or adding obstacles in Dash’s way!

What you’ll Need:

- Dash
- A couple friends or your family members*
- Optional: obstacles for Dash to navigate around

*COVID modifications: This activity can be modified by having 6ft of distance between participants and/or fewer participants.
Set up

1. Get **all everyone** to sit in parallel rows, in a circle, or in any other configuration that lets Dash run around in the middle.

2. The first person with the tablet has to send Dash from their position to someone else. Call out the person you’re sending Dash to and then give Dash instructions on how to get there using **Blockly** or **Path**.

3. Make a rule that everyone needs a turn before anyone can have a second turn.

4. Did Dash make it? If Dash got to the right spot, you get **3 points**! If Dash missed the goal by 1 person, you get 2 points. If Dash was 2 people off, you get 1 point! Now it’s the person who got the robot’s turn, so you’ll need to pass them the tablet! Keep playing until someone gets 10 points!

Want to challenge yourself? Send 2 Dash robots back and forth, or add an obstacle in the way! You can use the repeat until **Obstacle in Front** block to navigate around things in the way!

Play Options

In **Blockly**, use angles and distance to send Dash to the right place. Be sure to navigate around obstacles!

In **Path**, draw Dash’s path to the destination! Remember that each grid is the length of a Dash!
What you’ll Need:

- Dash
- Building Brick Connectors
- Plank, LEGO bricks, aluminum, tape, pipe cleaners - be creative with your armor and weapons!

The Ultimate Joust

Have a friend with a Dash robot or another toy itching to compete in a battle with Dash?

See if your Dash has what it takes to win The Ultimate Joust. Prepare Dash for battle by building a weapon and armor. Then build your own algorithm to face your opponent! Grab some friends to watch the showdown.

Set up

1. Think up your game rules. How will the robots compete, and what does it take to win? Check out some ideas for how to design your game below!

2. Prepare your robot for battle! What armor and weapon will you build on Dash? Use the Building Brick Connectors to add LEGO or fashion your own armor using spoons, aluminum foil, and any other toys you might have.

   It’s all about style and wearing your colors proudly. Be sure to add a cape or personal touch for flair!
3  Program the winning move. Use Blockly or Go to program your ultimate moves.

Play Options

Walk the plank - Put a plank on the ground (hint: an IKEA shelf works wonders) and put your bots across from each other. The last robot that stays on the plank wins! Here’s an idea to use the head motion to knock your opponent off the plank:

Now it’s your turn! Create your own joust and ask an adult to post it to YouTube with #makewonder! Show the world what you created with code!

Shield Knockdown - Time to chrrrrrrrrrrge! Be sure to secure your weapons and your armor to Dash. Charge the robots towards one another, and the last bot whose shield falls off is the winner!
I presented the idea of a Robot Olympics for first graders to our fifth grade Girls Science Club a couple weeks ago. I brought in some props to stimulate ideas for designing playful challenges. Props included stuffed animals, action figures, blocks, animal bowling pins, a Twister game and some oatmeal cans. The girls split up into groups of two or three, selected their props, and brainstormed about ideas. They came up with the challenges that they described below.

The next day, first grade students were asked to decorate 4” x 6” note cards with their names. Holes were punched into these cards during the Robot Olympics in order to keep score. Everyone got at least one hole punch for participating in each of these five activities.

On the day of the Robot Olympics, the girls arrived at school 15 minutes early to set up the multi-purpose room. Each first grade class was scheduled for a one hour time slot between 8:30 and 11:30. The fifth grade girls ran the entire program, giving instructions at the start of each class session, rotating students through the activities and monitoring the overall tone of the event. Check out some of the activities!
1 **Sweep-A-Thon**

In this event, players control Dash using the Go app to sweep stuffed animals and action figures into a square marked by painter’s tape. The more toys they sweep into the square, the more points they get. Each toy equals one point plus an extra point for participating. After a while, we realized that the animals and action figures had to move closer to the square because each first grade player only has one minute.

2 **Crash of the Cans**

This game is called Crash of the Cans – oatmeal cans – for the Robot Olympics. The object is to get around all of the cans and then to the finish. Players use Go to steer the robot around the cans without knocking them down and then on to the blue square.

3 **Dotty**

Players use Path to control Comet, the robot, to move along a Twister board. The Twister spinner is used to determine the color of the dot they need to go to. The robot is placed in front of the color just off of the Twister board. The player draws a path to get to a colored dot. If they get to the right color in one move with all three wheels on, they get three points, two wheel on earns two points, and one wheel is worth one point.

4 **Robot Roll**

Robot Roll is played with Blockly. Robot Roll is basically bowling, but instead of using a ball we are using WALL-E, a robot, and animal bowling pins. You also need tape, an iPad, and WALL-E the robot. Half of the code is given to the player on the iPad and they have to finish it up. They press the top button on WALL-E, the robot, to see if his code knocks down the pins.

5 **Tower of Robots**

At the Robot Olympics players use the app Blockly to code Dash to get to Dot, who is at the end of a path of wooden blocks. Dash has to first get up a ramp of wooden blocks and then under a bridge before getting to Dot.
Q: What kind of beat does a robot march to?
A: Any kind of algo-rhythm.

Q: Why do robots like cold weather?
A: Because they get to boot up.

Q: When a robot goes to jail, what’s the charge?
A: About 6 volts.

Have a joke to share? Tag us with #makewonderlaugh