

## STEM Challenge 2 - Marble Mazes

### YOUR CHALLENGE

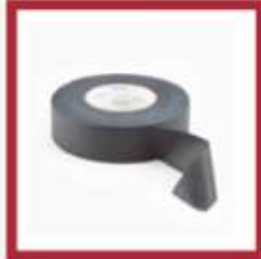
Get your Marble from A to B

In this activity, you will use recyclable materials to design and make your own wall marble run. Do you think your marble will make it to the end of your track?



## STEP 1

### Gather Your Materials



## STEP 2

### Design your marble run

Think about a design for your marble run before you start building.

Make sure your marble run starts high above the ground.

You can use a big piece of cardboard or you can use a clear wall in your home 😊

Will it zig-zag back and forth?

Do you want to include any flat or even uphill sections?

Think about whether you want to use the whole tubes or cut them in half.



Whole tube



Half tube

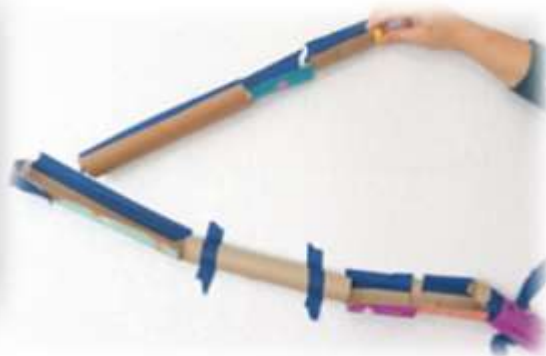


## STEP 3

## BUILD

Start building your track. Using your cardboard tubes, assemble your track according to your plan. Tape the first cardboard tube to your big piece of cardboard or a wall with a long strip of tape.

Place your second tube next to the first one, and so on. Don't build it all yet. Build a small part and then stop to test it.



## STEP 4

## Investigate some more!

If your marble didn't make it to the end, try to figure out WHY.

Is there a spot in your track where the marble got stuck?  
Was the marble going too slow to make it over a hill?

If necessary, make changes to your design, like adjusting the angles of your tubes or improving the tube connections.



If the marble made it the whole way to the end, try to add more parts to your track, or build alternative routes by connecting more cardboard tubes. ENJOY