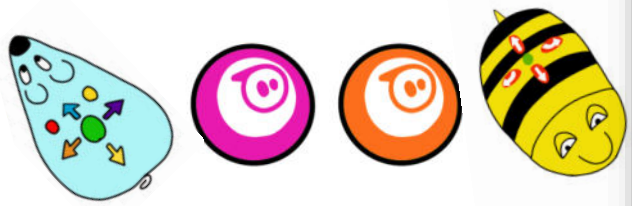
ROBOT MAZE

STEAM MAT



USE WITH YOUR FAVORITE ROBOTS

INTRO

This hands on activity is a great way to teach students how to program various robots (Bee Bot, Sphero, Robot Mouse). This mat can be used with robots that can move on a floor. Program your robot with directions to allow it to move along the mat.

Set Up:

- Print photo squares
  - *be careful when printing – unselect *fit to page* – print photos in their current size 5x5 inch
- Cut around black like to remove excess white on page. Leave black squares.
- Arrange photos in a mat – 3 squares across
- Place the "start here" square at the top of the mat
- You can duplicate the sample photo or arrange the squares in your own way
- Tape the back of the photos so the tape is not visible
- Laminate the entire mat

2nd Option

- You can also print the blank boxes on color paper
- Print out clip art squares
- Laminate & cut all individually. Allow students to move pieces around to create their own mazes on the floor

Photo Task Cards

- Print and laminate photo task cards
- Place photo task cards in a pile next to the mat for students to select during the activity

SAMPLE

Place START HERE at the top

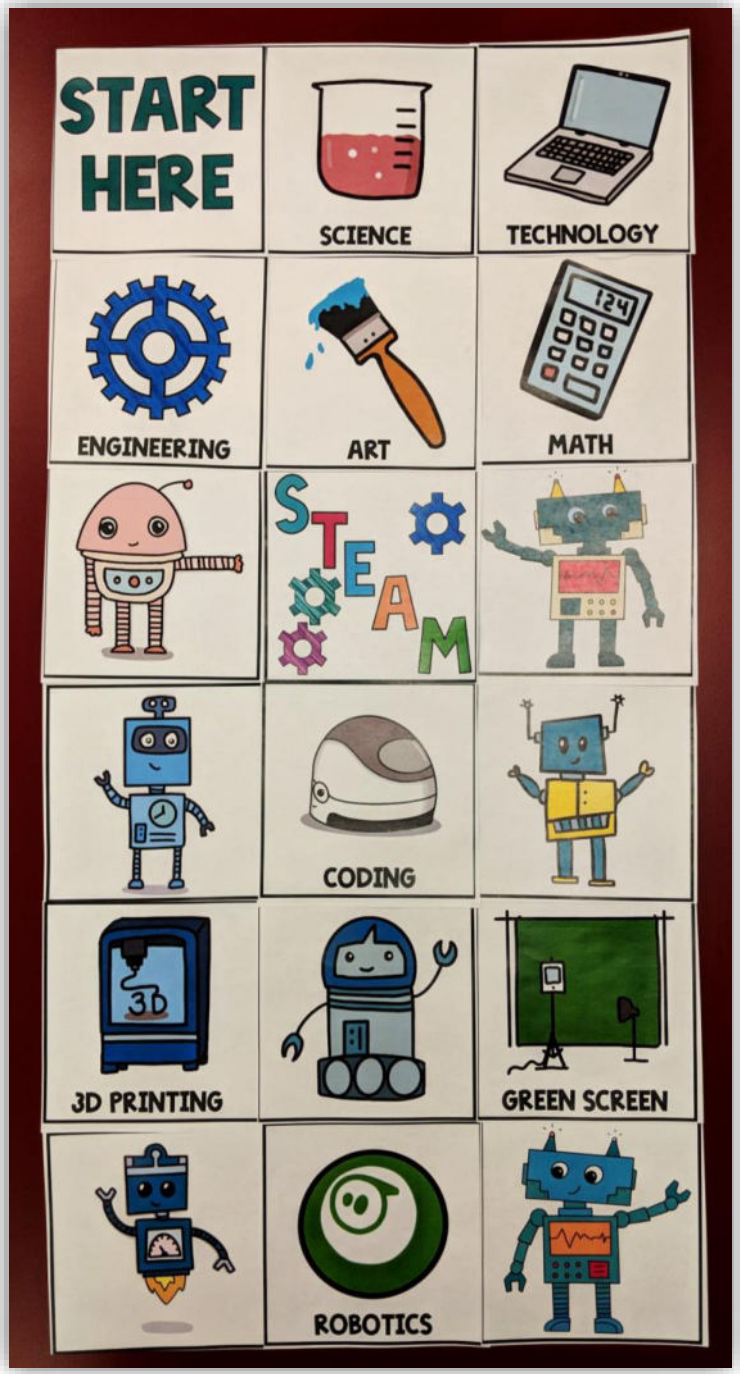


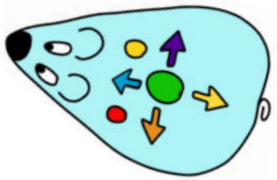
Photo task cards

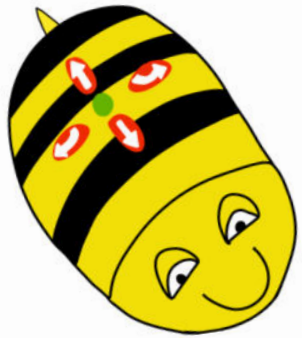
ACTIVITY

- Use this mat with your favorite classroom robot
- After instructing students how to use the robot, introduce the STEAM mat
- Students can work alone or with a partner
- Students will start by placing the robot on the *start here* spot
- Students will pick a photo task card from the pile
- This card will instruct them which square to program the robot to reach
- Students will program the directions
- Press go and watch if the robot reaches the assigned square. If it does not, always try again!
- After reaching the assigned square, pick a new photo task card and repeat the steps above
- Continue until all photo task cards have been used

- Another option – do not tape pieces together in a mat. Keep each square separate.
- Allow students to create their own maze by putting together each square
- Students can create various mazes & program the robot to follow the track

- Have fun and happy coding!





SCIENCE

TECHNOLOGY

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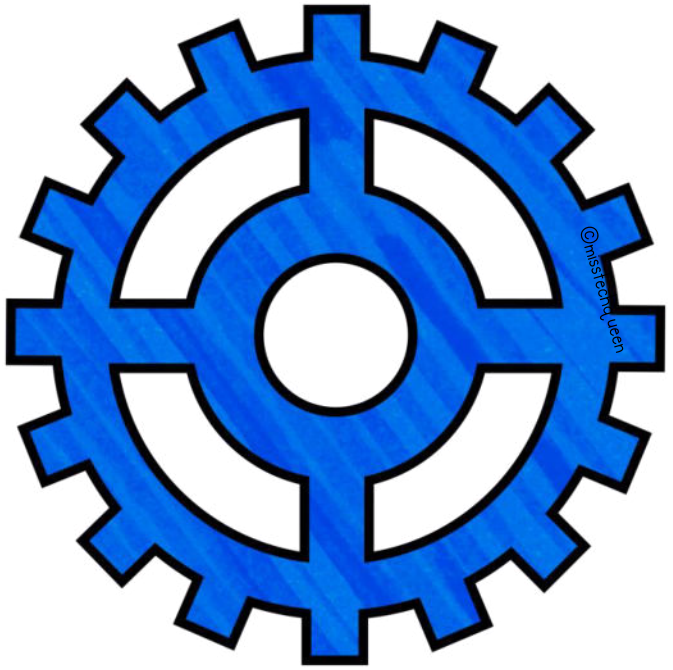

ENGINEERING

ART

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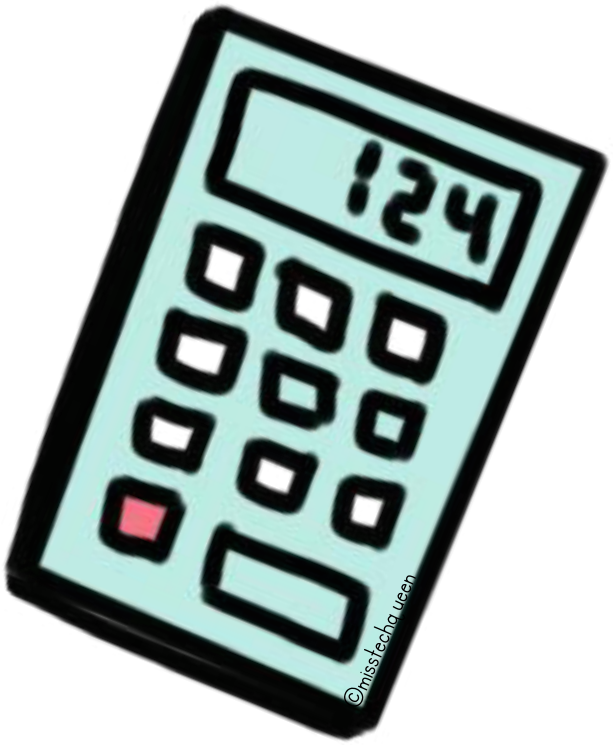

MATH

ROBOTICS

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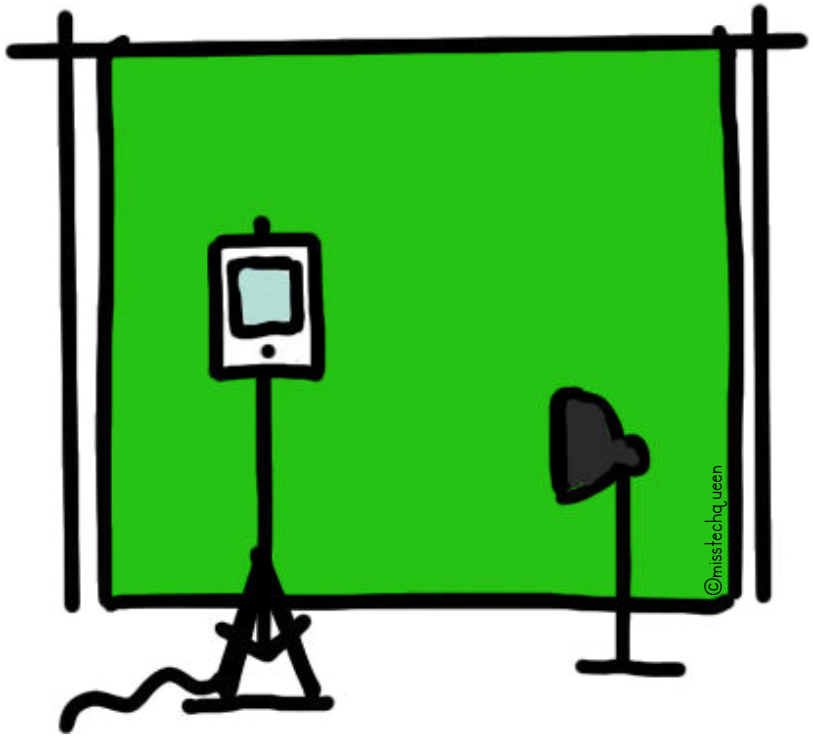
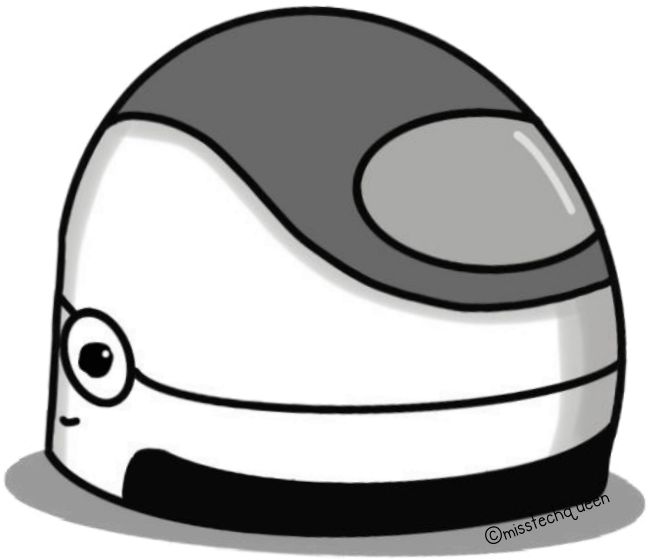


GREEN SCREEN



CODING

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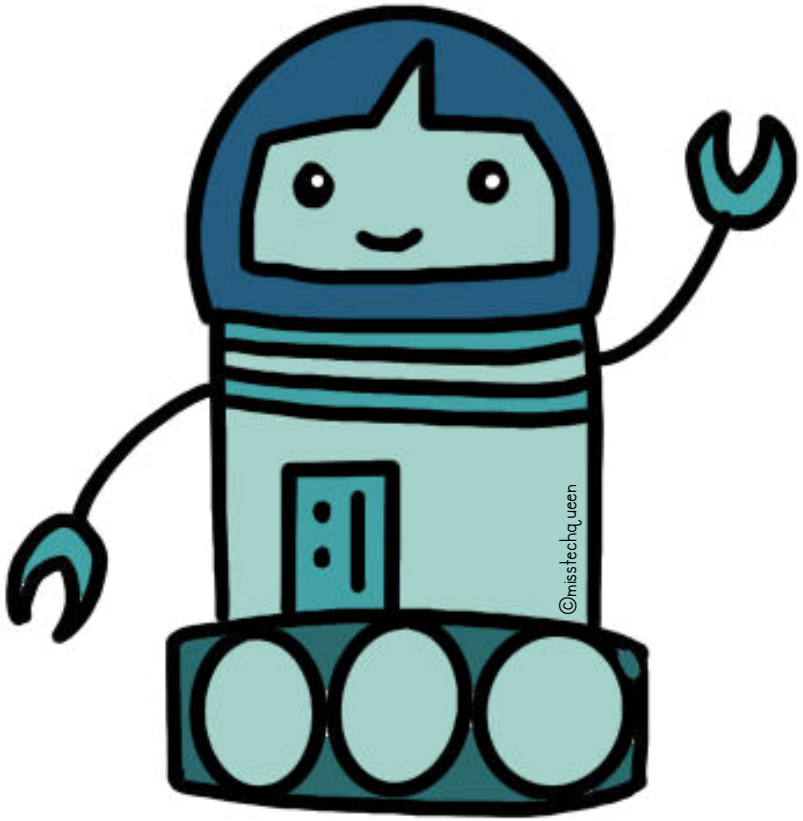

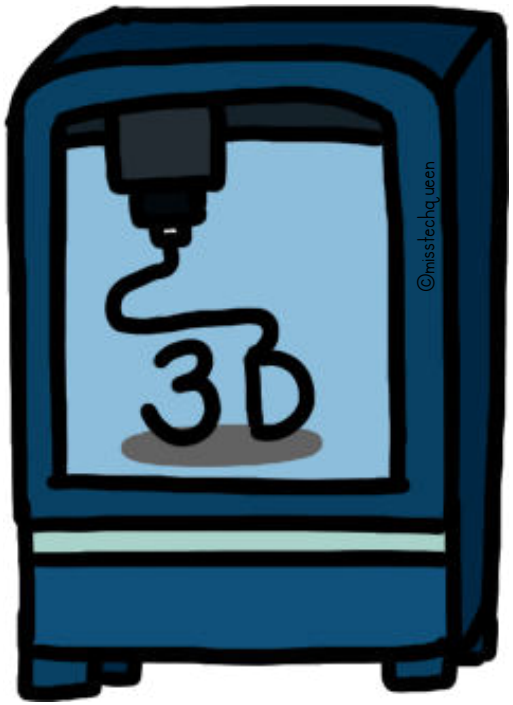

3D PRINTING

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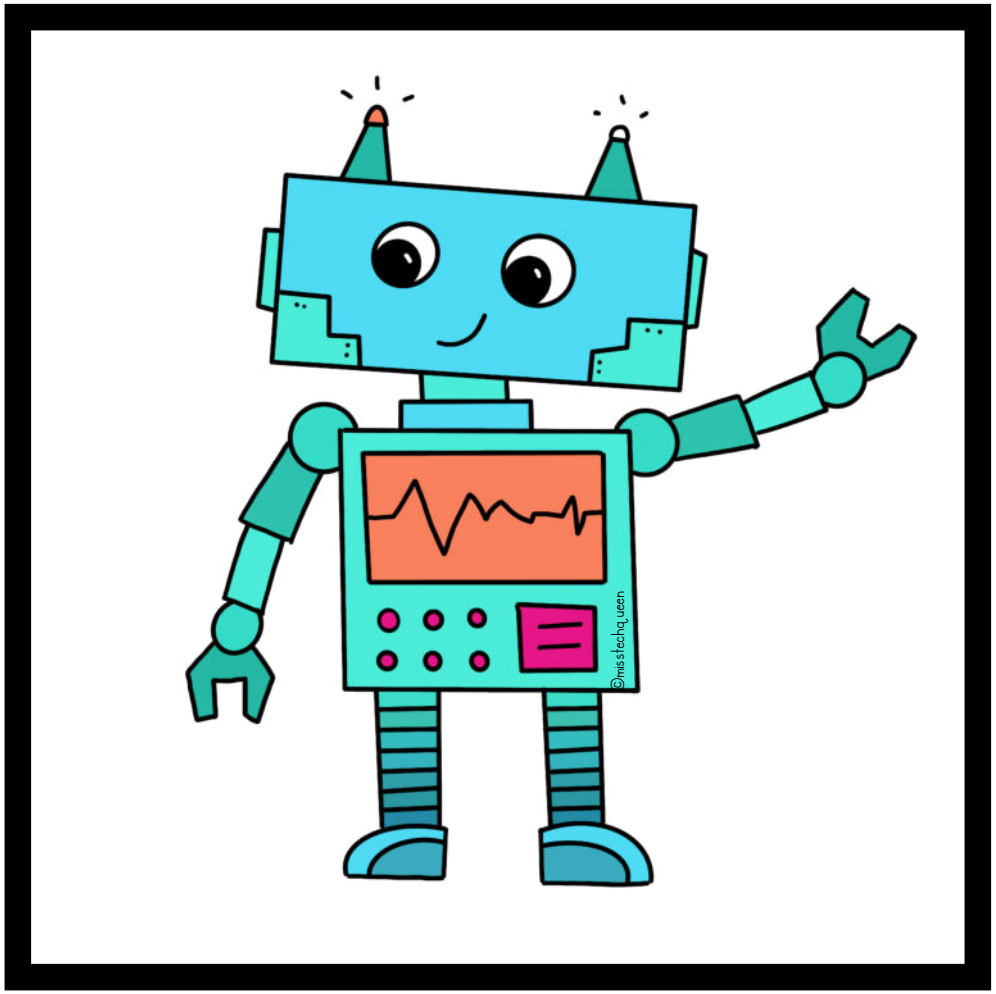

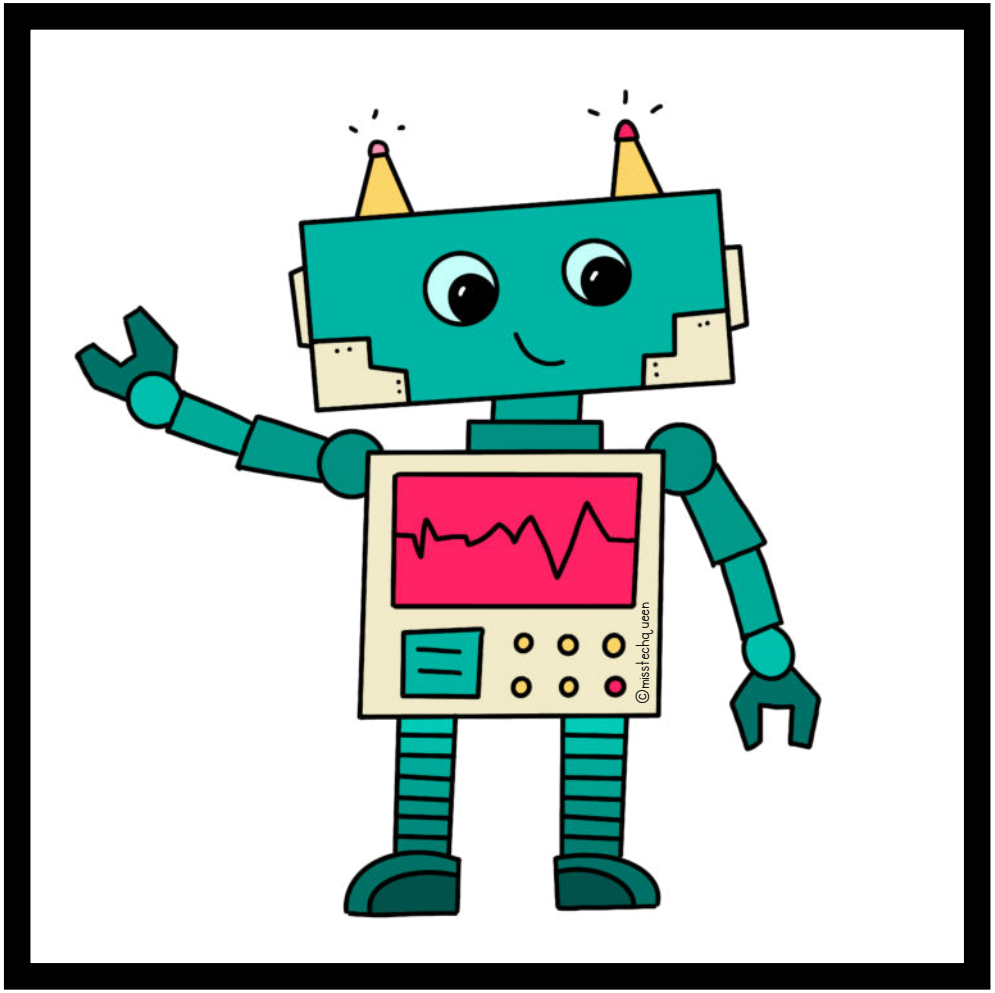

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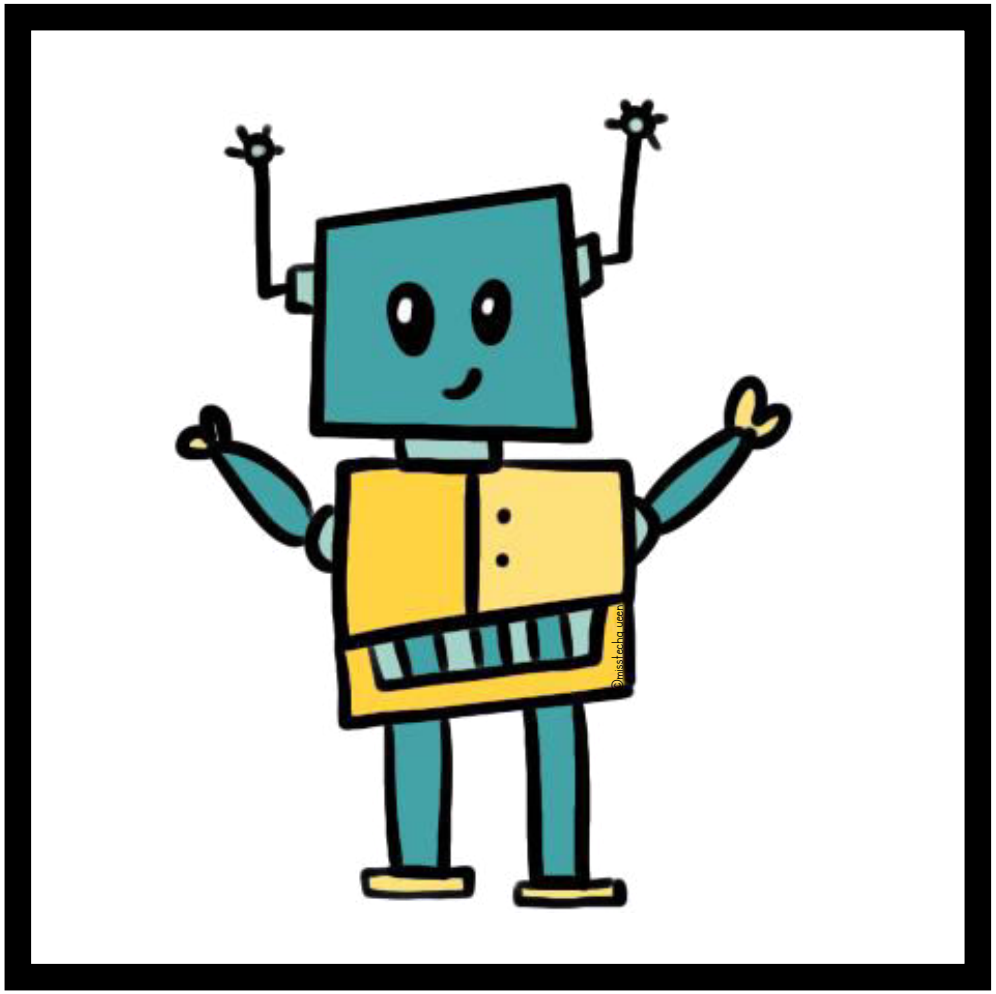

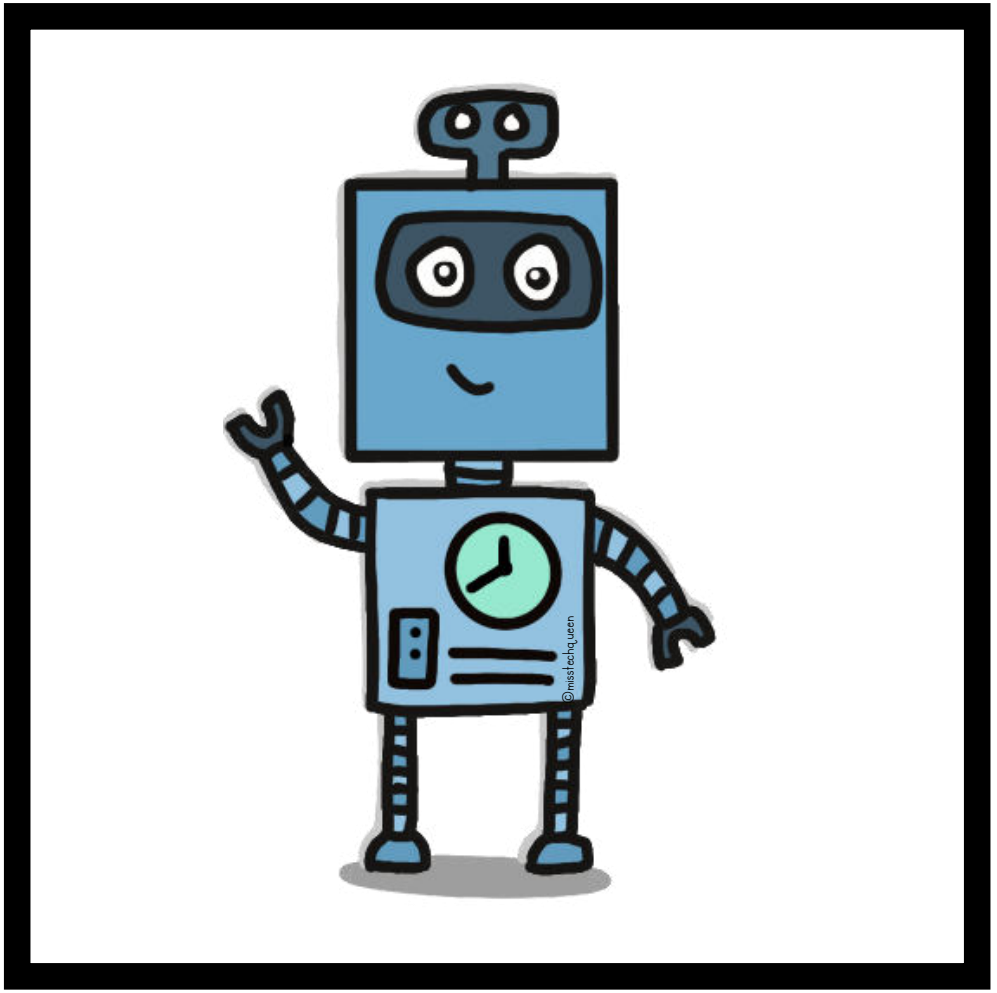

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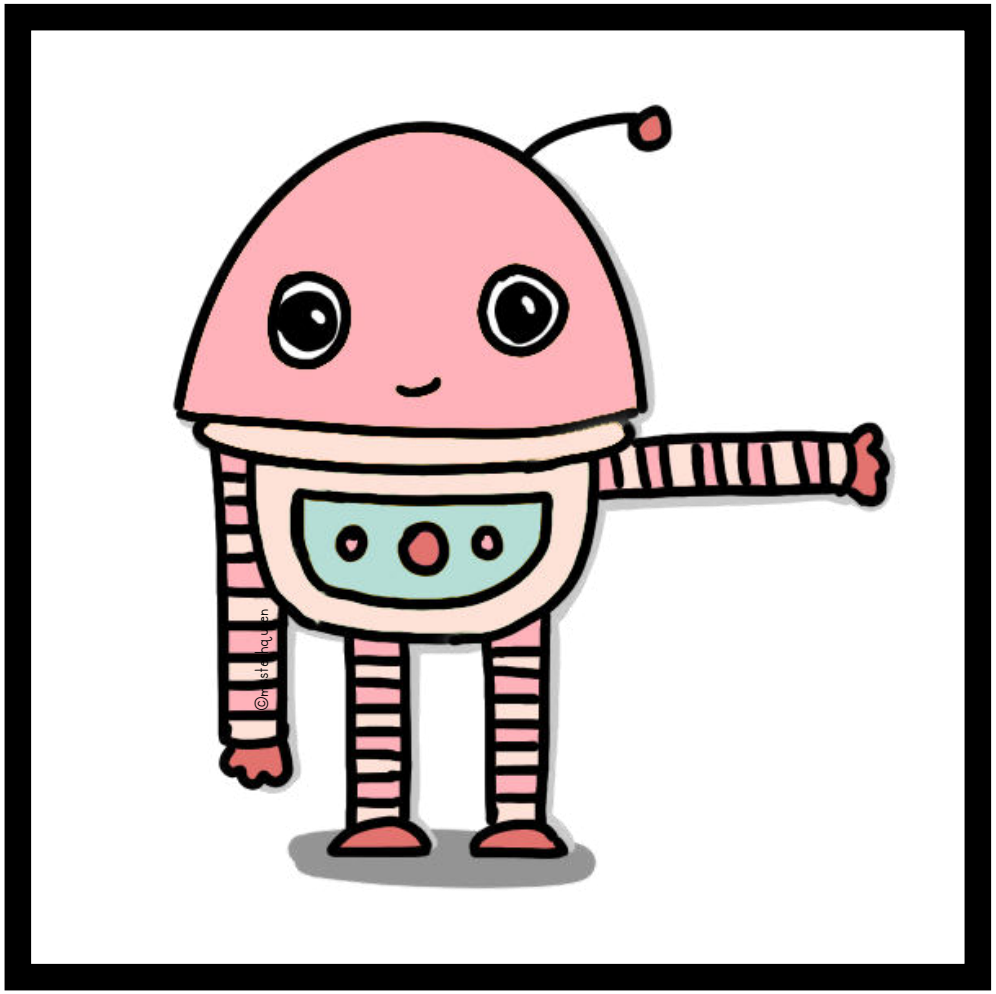

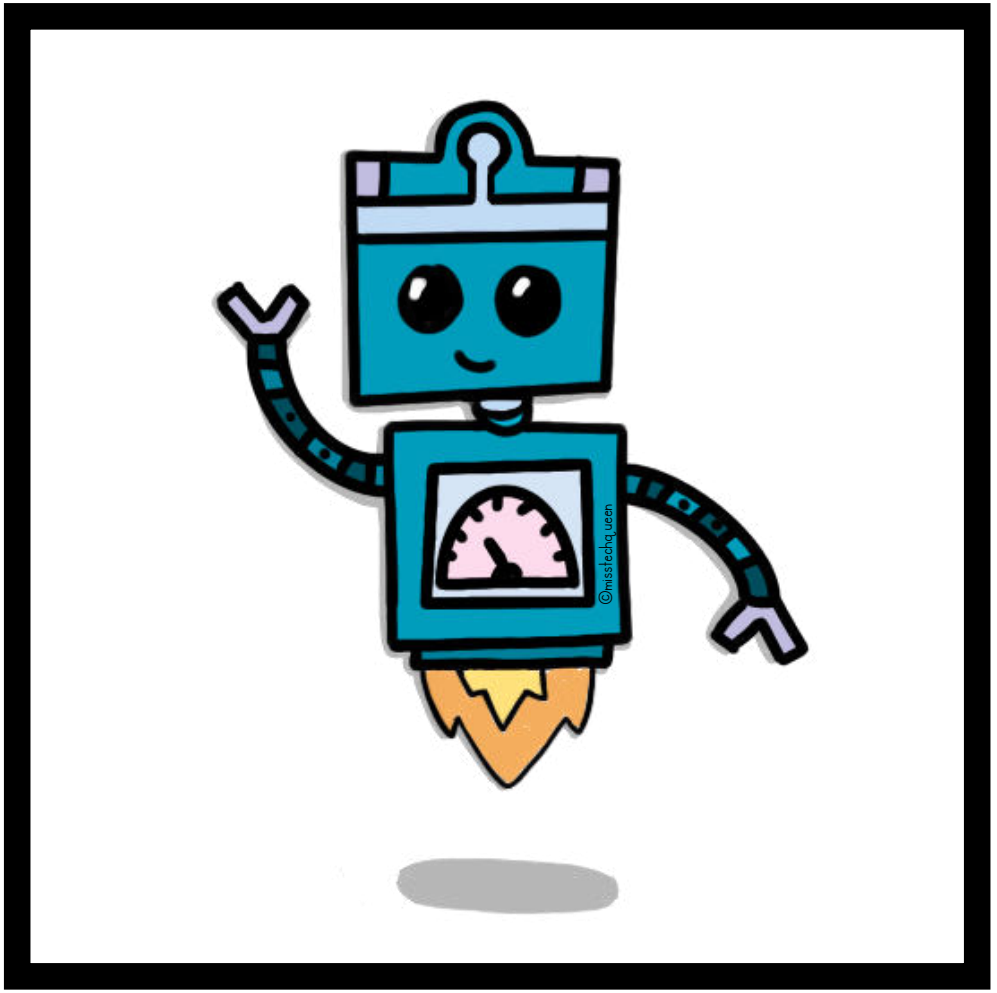

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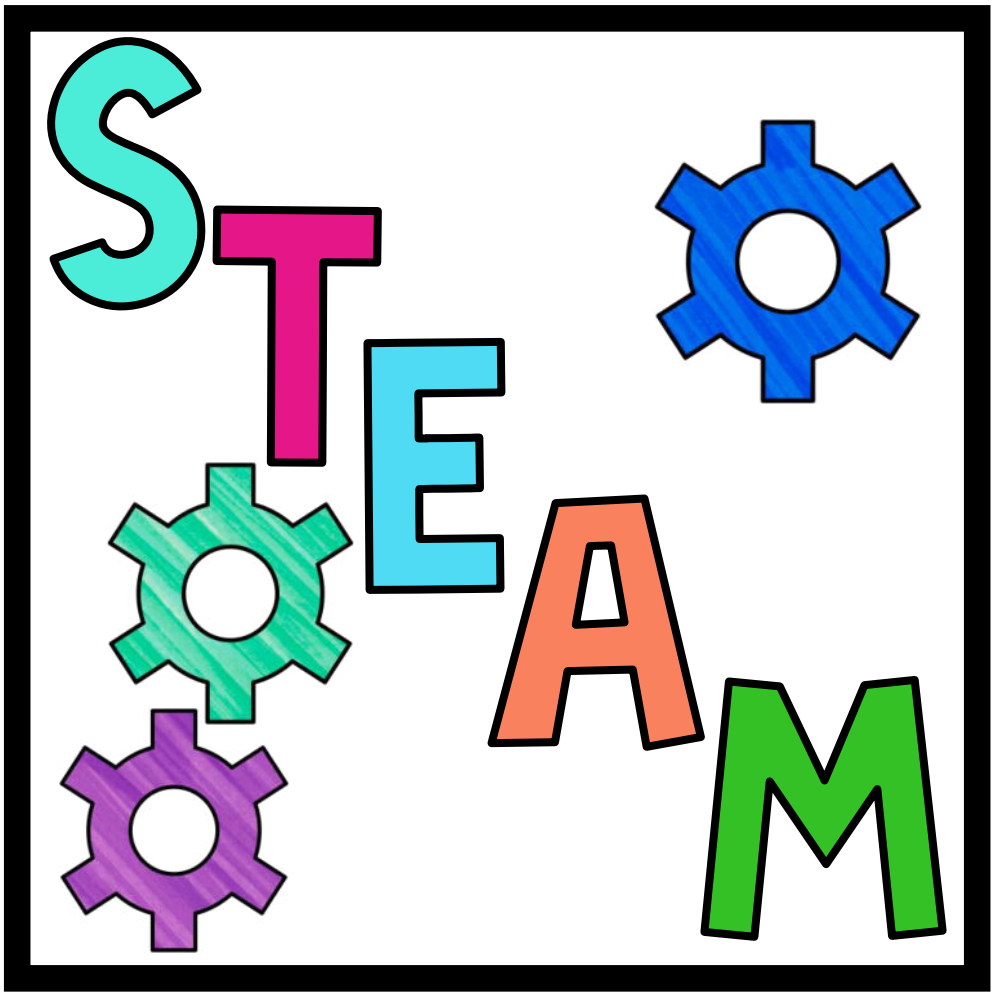
START HERE



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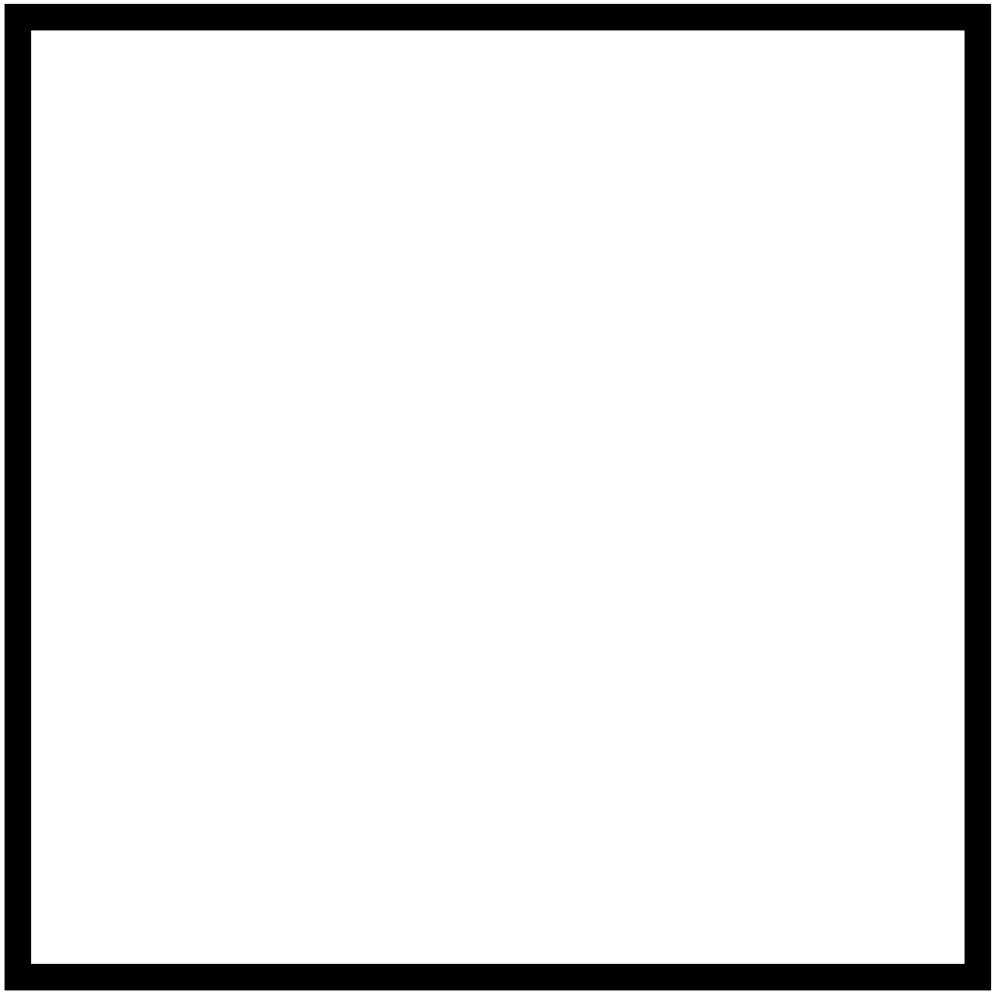

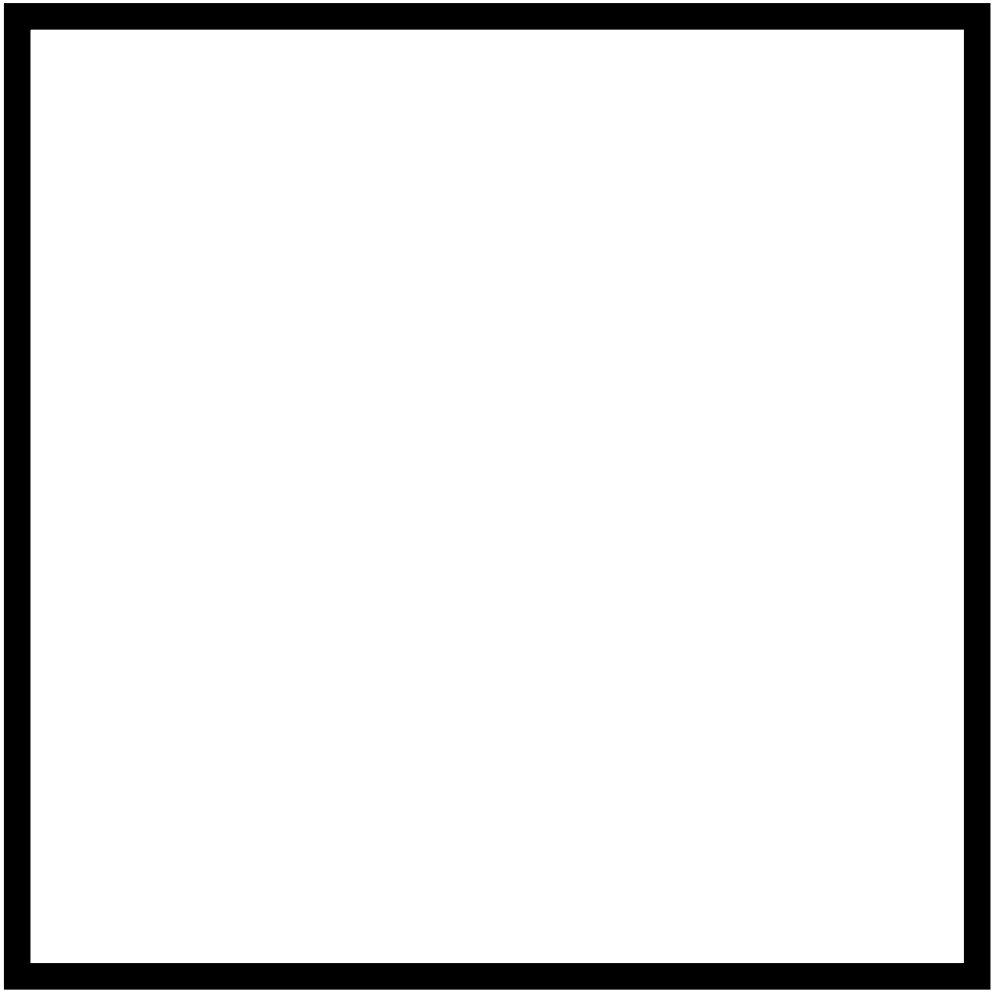

Blank squares – print on color paper to allow students to put together their own maze

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PROGRAM THE ROBOT TO REACH THE

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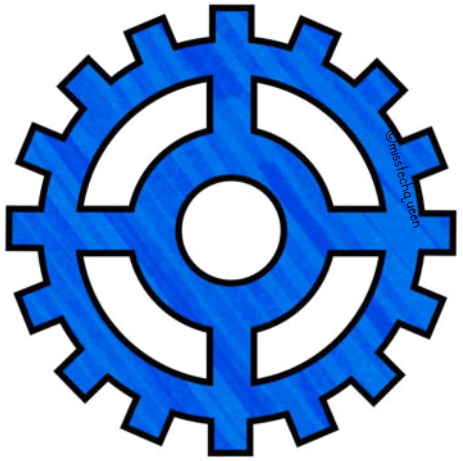

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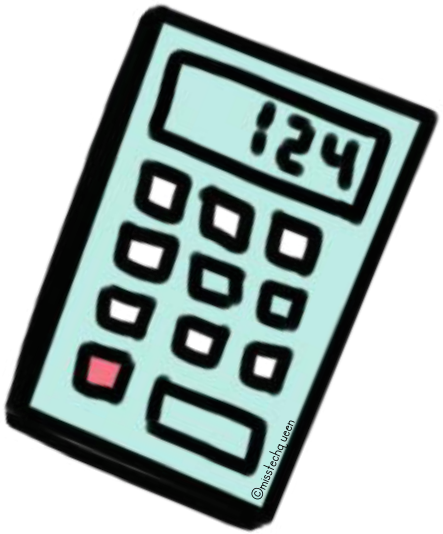

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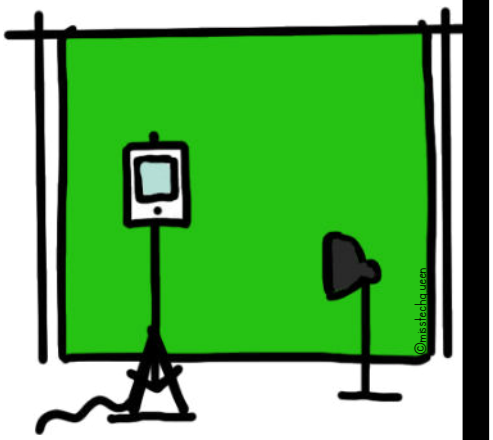

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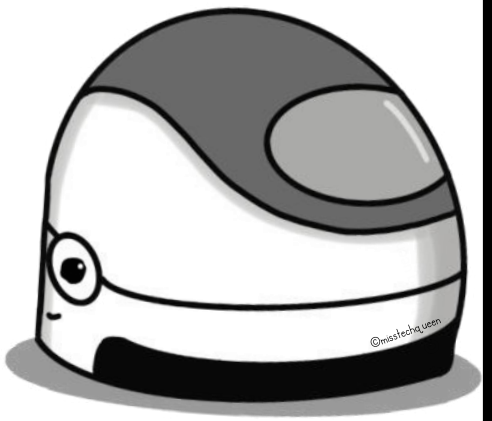

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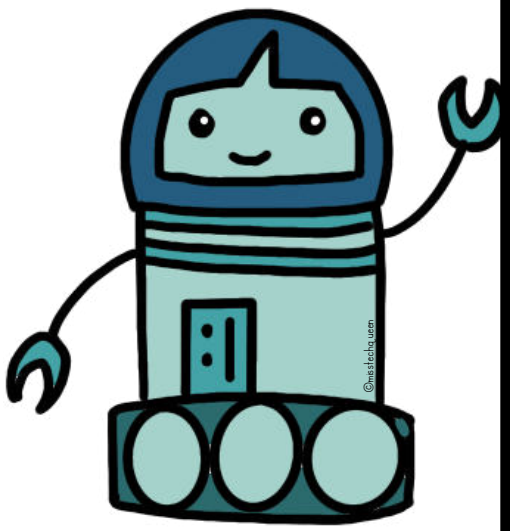

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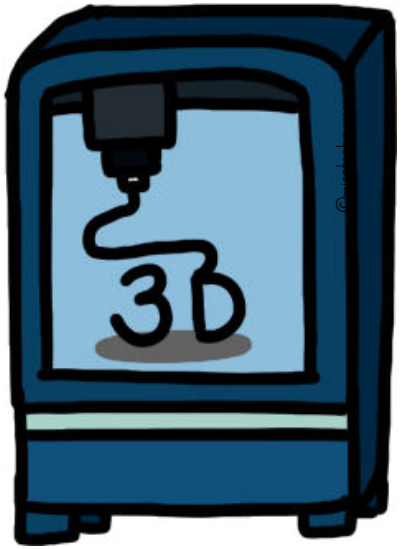

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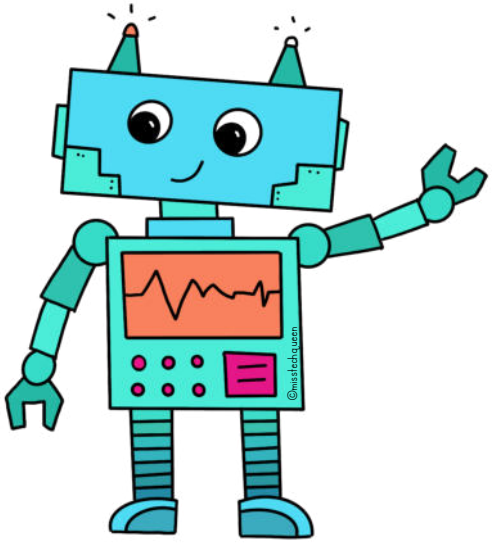

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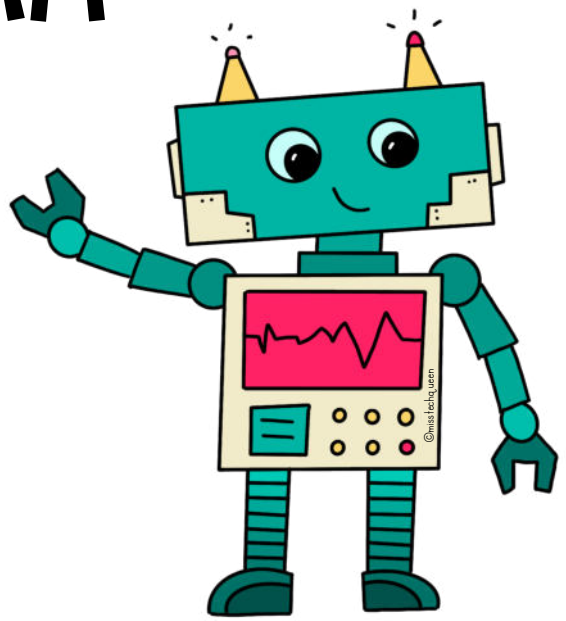

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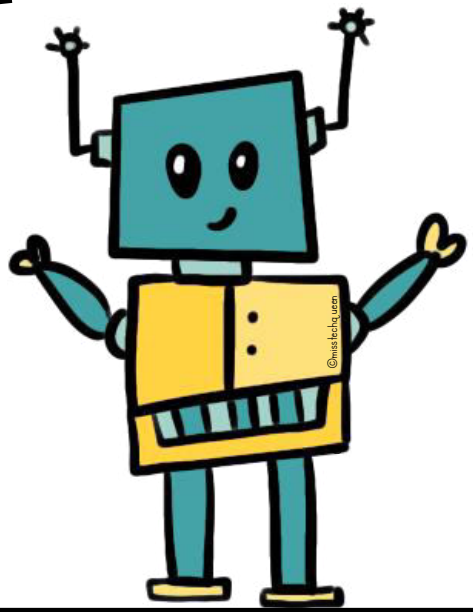

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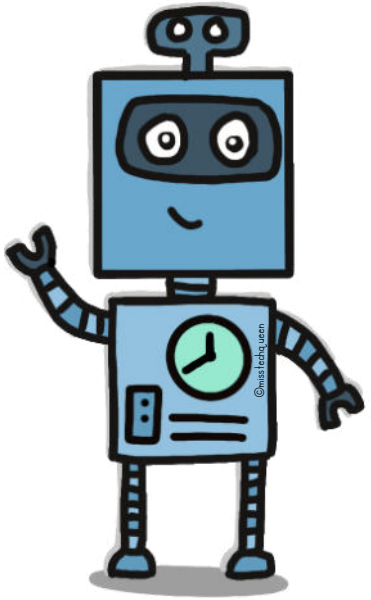

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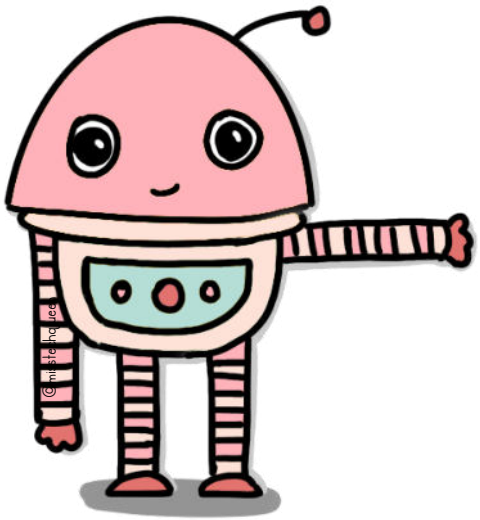

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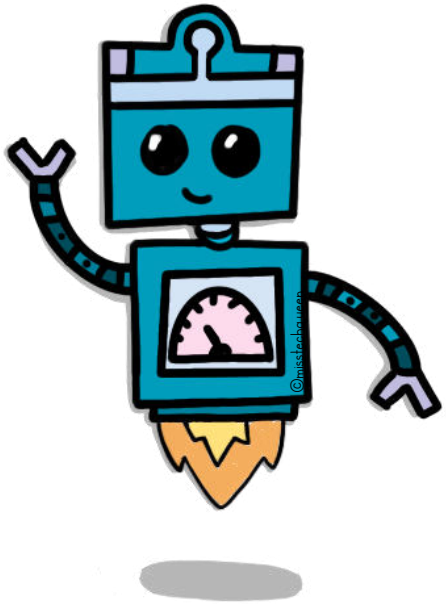

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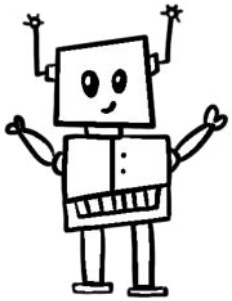

ROBOT MAZE

Draw arrows to show the steps to your program. Then test it out with your robot!

While programming my robot I learned _____

_____

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THANK YOU FOR YOUR DOWNLOAD!

ABOUT THE AUTHOR:

Hi! I am Dena from New Jersey. I am currently an enrichment teacher/gifted & talented for grades K-4. For the last three years I have been immersed in technology education, primarily in grades 5 and 6. Earlier in my career, I taught 4th grade & special education. For as long as I can remember, teaching has been my passion & thus, I have pursued my dream career.

Using STEAM activities in my classroom allows students to demonstrate creativity while designing. While promoting the art of exploration & discovery, I have found that my students operate on an independent basis as they work at their own speed while taking charge of their own education. STEAM incorporates teamwork, fine motor skills, problem solving, & more.

My student load is a hefty one, 350 students a week in five different grade levels. It is difficult to photocopy large packets & use new materials each week. Instead, I must use simple, low prep activities that still incorporate these foundational skills. I know there are many educators in a the same position as me, which has inspired me to share my activities on TPT. I hope your students benefit from these activities just as much as mine do!

I love to see your students using these activities. Feel free to tag me in photos on social media @MissTechQueen! If you have any questions or comments about the product, please email me.

Thank you for supporting my store,

Dena

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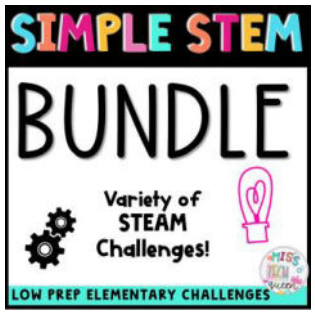

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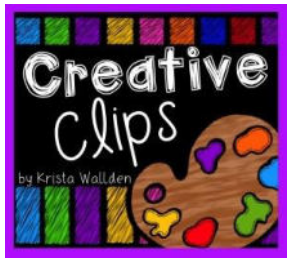

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