

STEAM at home Challenge Board

25 Science, Technology, Engineering, Art and Math
activities to do at home

When learning is distant or you
want an extra challenge...and you're
feeling a little creative.

By: Mr. STEMurray



Instructions

- Select a challenge and complete it
- Once it's done complete the journal page
- Make an X through the challenge when done.

Mastery-Levels

- 5 in Row you're a STEAM all-star!
- 10 done you're a STEAM-Master
- All 25 and you're a
STEAM-GRANDMASTER!

STEAM at Home Challenge Board

S	T	E	A	M
Research an endangered animal. Create a public service announcement explaining what people can do to save that animal.	Create a secret code. Write a message in the secret code. Give it to someone to see if they can figure it out.	Using two pieces of computer paper and 10 inches of tape. Build the tallest tower you can in 10 minutes. See if you can beat your record in 5 minutes.	Cut out some pictures from old magazines. Using them make a collage that tells the story of the best day ever.	Arrange 11 objects on a table. With a partner, take turns picking up 1-3 items. Whoever picks up the last objects loses.
Track everything you've thrown away in a day. Give your list to a friend. Have them write a story one what you did that day based on the list.	Go around your house and randomly pick 20 different objects. Find a way to organize everything into 4 different groups. Show what you did to someone and see if they can figure out the groupings	Using objects around your house. Construct an upside down pyramid that's at least 10 inches tall. You may not use any tape, glue or anything else sticky though.	Color a whole piece of paper with bright colored crayons. Then, cover the whole picture in black crayon (the darker the better). Use a toothpick to scratch out a piece of tie-dyed art.	Give a math problem to an adult. Have them share how they solved it. Show them how you solved it and compare.
Find 5 seeds, place them in a ziplock bag with a damp paper towel. Place them around your home in different places. Observe what happens over a week.	Point a remote control at a cell phone while the camera is on. Press a button on the remote and watch what happens on the phone. Figure out if there's a pattern with different button presses.	BONUS ACTIVITY: Complete the cookie face challenge. Put a cookie on your forehead. Get it into your mouth without using your hands.	Draw a picture for 60 seconds. Pass the picture to someone else and let them draw for 60 seconds. Take turns passing the picture back and forth until the masterpiece is complete! .	Without a ruler. Come up with a way to measure the perimeter of where you live. Use the same method to measure the length of a pencil.
Find 5 patterns in nature, come up with and explanation on why those patterns exist.	Create a simple line drawing with a pen and a piece of paper. Send the instructions to someone to see if they can draw the same picture as you!	Create a device that can sort change. Into different types. (dimes, nickels, quarters, etc.)	Using a marker, make 100 small dots on a piece of paper. Connect the dots to create a picture.	Make a data chart of 100 dice rolls of a pair of dice. Make a guess on what would happen if you were to roll three. Test out your guess..
Put an egg into a glass of water. Experiment to find a way to make an egg float in the middle of the glass.	Will an adult's permission take apart an old electronic device. See if you can figure out how it works	Out of recycled materials, build a dinosaur that has two legs touching the ground. See how long you can make the dino before it falls over.	Find a famous painting or picture. Recreate the painting with yourself and things around your house.	Look up a cooking recipe. Determine what the ingredients would be if you wanted to make half the amount of it.



STEAM at Home Challenge Board

S	T	E	A	M
Research an endangered animal. Create a public service announcement explaining what people can do to save that animal.	Create a secret code. Write a message in the secret code. Give it to someone to see if they can figure it out.	Using two pieces of computer paper and 10 inches of tape. Build the tallest tower you can in 10 minutes. See if you can beat your record in 5 minutes.	Cut out some pictures from old magazines. Using them make a collage that tells the story of the best day ever.	Arrange 11 objects on a table. With a partner, take turns picking up 1-3 items. Whoever picks up the last objects loses.
Track everything you've thrown away in a day. Give your list to a friend. Have them write a story one what you did that day based on the list.	Go around your house and randomly pick 20 different objects. Find a way to organize everything into 4 different groups. Show what you did to someone and see if they can figure out the groupings	Using objects around your house. Construct an upside down pyramid that's at least 10 inches tall. You may not use any tape, glue or anything else sticky though.	Color a whole piece of paper with bright colored crayons. Then, cover the whole picture in black crayon (the darker the better. Use a toothpick to scratch out a piece of tie-dyed art.	Give a math problem to an adult. Have them share how they solved it. Show them how you solved it and compare.
Find 5 seeds, place them in a ziplock bag with a damp paper towel. Place them around your home in different places. Observe what happens over a week.	Point a remote control at a cell phone while the camera is on. Press a button on the remote and watch what happens on the phone. Figure out if there's a pattern with different button presses.	BONUS ACTIVITY: Complete the cookie face challenge. Put a cookie on your forehead. Get it into your mouth without using your hands.	Draw a picture for 60 seconds. Pass the picture to someone else and let them draw for 60 seconds. Take turns passing the picture back and forth until the masterpiece is complete! .	Without a ruler. Come up with a way to measure the perimeter of where you live. Use the same method to measure the length of a pencil.
Find 5 patterns in nature, come up with and explanation on why those patterns exist.	Create a simple line drawing with a pen and a piece of paper. Send the instructions to someone to see if they can draw the same picture as you!	Create a device that can sort change. Into different types. (dimes, nickels, quarters, etc.)	Using a marker, make 100 small dots on a piece of paper. Connect the dots to create a picture.	Make a data chart of 100 dice rolls of a pair of dice. Make a guess on what would happen if you were to roll three. Test out your guess..
Put an egg into a glass of water. Experiment to find a way to make an egg float in the middle of the glass.	Will an adult's permission take apart an old electronic device. See if you can figure out how it works	Out of recycled materials, build a dinosaur that has two legs touching the ground. See how long you can make the dino before it falls over.	Find a famous painting or picture. Recreate the painting with yourself and things around your house.	Look up a cooking recipe. Determine what the ingredients would be if you wanted to make half the amount of it.

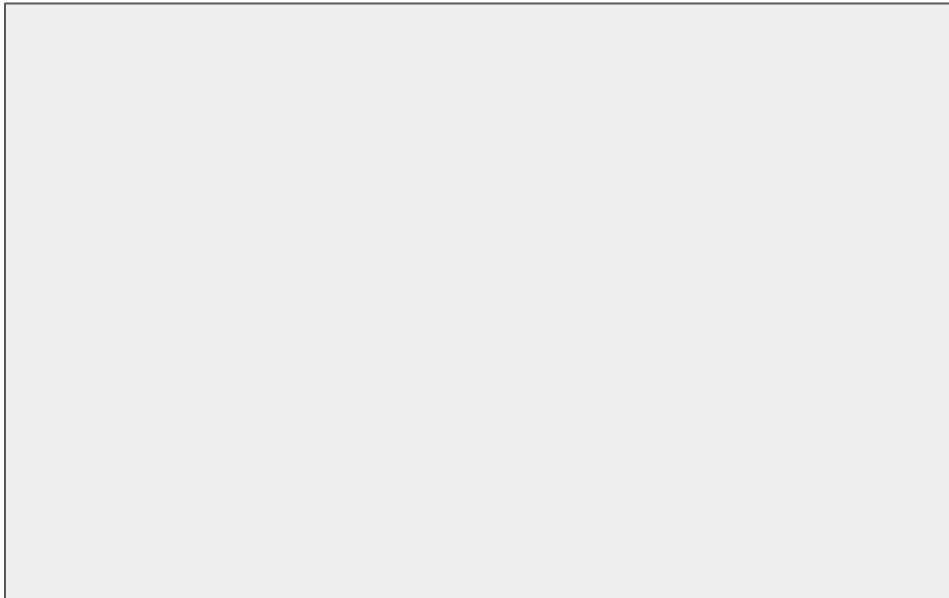


Journal Reflection Page

Describe the Challenge you picked:

Why did you pick this challenge?

In the box below sketch picture of what you made (if you did something on another page, include those instead)



Describe how your solution works.

What was challenging about this project? How did you overcome these challenges?

What did you learn while doing this challenge?

Graphing Page



Contact

Thank you for downloading! I hope this helps during these trying times. If you have any suggestions or topics please share them.

Contact

mrstemurray@gmail.com

www.twitter.com/mrstemurray

Instagram @MrSTEMurray

<https://www.teacherspayteachers.com/Store/Mrstemurray>