Daily DE

ELEMENTARY GRADES 3-5
Week 3: Grades 3-5

**THE "M" IN STEM MONDAY**
Math is an important part of STEM Careers and Real-World Challenges—put your problem solver hat on and let’s get to work.

**GET TECHY WITH IT TUESDAY**
Explore how technology is part of our everyday lives.

**WORKOUT WEDNESDAY**
Get hands-on as you engage in activities for the mind and body.

**THOUGHTFUL THURSDAY**
Learn strategies for being mindful of yourself and others.

**FIELD TRIP FRIDAY**
Go on virtual field trips to amazing destinations.

**WEEKEND CHALLENGE**
Gather some food from around your house: empty cereal boxes, bread, canned or frozen fruits and vegetables, milk and dairy products, dog and cat food, bird and fish food and potting soil (if it is not possible to gather an item, substitute the nutrition label, which can often be found in an online search). Use the nutrition labels to have a conversation about food sources: Where did the food come from? What vitamins did you find? What did you notice about the label? Was there anything that surprised you?

Siemens STEM Day Activity - Minerals In My Meal
The "M" in STEM Mondays
Recycling Food & Waste

Did you know that data is an important part of STEM? Data tells scientists and engineers about the problems in our world. Take a look at the facts below and think about what the data is telling you:

- Around the world, about 1 in 9 people (821 million people) suffer from hunger.
- By 2050, an additional 2 billion people are expected to be undernourished.
- 500 million small farms worldwide provide most of the food consumed in a large part of the world.
- About 1/3 of the world’s food produced for humans to eat gets lost or wasted every year.
How did the data make you feel?
Did you notice any problems?
Do you have any ideas for solutions?

Let’s read about some ways to reduce the amount of food we waste in our own homes. Click on the link below to learn more from the United States Environmental Protection Agency.
Want to learn more about ways to reduce the impact of wasted food?

Click on the link below to read about an important solution – Composting!

**Composting at Home**

Adapted from the STEM Careers Coalition
Your "M" in STEM Monday Weekly Challenge

WASTED FOOD IS A HUGE PROBLEM AROUND THE WORLD. SOMETIMES TO SOLVE A BIG PROBLEM, YOU NEED TO THINK OF LOTS OF SMALL SOLUTIONS.

USING WHAT YOU NOW KNOW ABOUT FOOD WASTE, YOUR CHALLENGE IS TO DESIGN AN INFORMATIONAL MESSAGE EXPLAINING THE PROBLEM AND ENCOURAGING OTHERS TO TAKE ACTION!

• Identify how you will share your information. Think about making a flyer, video, podcast, or brochure to get the word out.

• Include the data! People need to know the facts. Make sure you use the data and cite your sources when explaining to others.

• Offer possible solutions. How can we all start to take small steps to solving the bigger problem? Provide your audience with some ideas to get started on reducing food waste in their own communities.
Get Techy with it Tuesday
Last week in your *M in STEM Challenge*, you designed a process that would help something run smoother in your home. This week, in *Tech Tuesday*, we’re going to think about how to add technology to that process.

We’ve been learning about technology for a few weeks now. Look around your home, what examples of technology do you see?

Make a list of all the technology you can see from where you’re sitting right now.

Adapted from *Manufacture Your Future*
Before we return to your process from last week, let’s learn about a new STEM career, a Robotics Technician!

Watch the video below:

Robotics Technician

Manufacture Your Future Videos

Adapted from Manufacture Your Future
Robotics Technician

As you heard in the video, throughout history, humans have invented tools and machines to help perform tasks that were difficult. Robots are now a part of our everyday lives.

Remember the process you created to help solve a problem in your home last week. Think about it:

Where could technology make the process easier? How could a robot help?
Grab a blank piece of paper, or graph paper if you have it, a ruler and a pencil! It’s time to imagine and blueprint for the robot of your dreams. Make sure your plan is detailed, include the features of the robot and label how they will work. Don’t forget to let us know what type of energy it needs to work.

At the bottom of your plan, provide one sentence to a Robotic Technician on why they should create your robot and what problem it solves.
Workout Wednesday
You’ve been working so hard on keeping up with your fitness journey.

You deserve a celebration dance! Watch the video below to get dancing.
Your Turn!

What does your touchdown dance look like?

Teach it to a friend!
Share your #GetMovingPLAY60 experiences for a chance to be featured!

Don’t Forget!

Found a great way to keep up with your fitness journey at home? We want to know!

Optionally, ask a parent or adult guardian to help you record and share your fitness journey.

What does your celebration dance look like?

@DiscoveryEducation
Thoughtful Thursday
Zen Zone

Last week you created a Zen Zone, a special chill-out or cool-down area in your home where anyone can go when they need a few minutes to take a break!

Today you are going to add more tools to your Zen Zone!

Adapted from Soar With Wings Family Activity 1
Step 1: Think About It

Writing or drawing can be a great way to calm down, think, and reflect.

1. Read through the "Think About It" idea starters.
   These can be used as a starting point if someone wants to write or draw while they're in the Zen Zone.

2. Then find a blank notebook or attach several pieces of paper together to make your own notepad.

3. Tape, glue, or write the "Think About It" idea starters onto the front cover or copy a different idea starter onto each page.

4. Then place it somewhere in your new space!

Think About It Idea Starters
- I'm proud that I...
- I wish that I...
- I wonder...
- I feel...
- I think...
- I'm confused because...
- I was surprised when...
- Next time...
- I keep thinking about...
- I learned...
- I will try to...
- I don't understand...
- I felt frustrated when...
- I can do better by...
- A positive choice for me is...
- I should...
- I shouldn't...
- If...

Adapted from Soar With Wings Family Activity 1
Step 2: Get Cool

While writing and drawing may be helpful for some people, there are other ways to cool down too!

1. Read through the "Get Cool" activities together.

2. Then come up with more ideas that would work especially well for your own family members.

3. Write down your favorite ideas and cut them out on individual pieces of paper and place them in a jar, basket, or other container.

4. Then label the container "Get Cool" and place it somewhere in your new space!

Get Cool Ideas
- Close your eyes and picture your favorite place.
- Close your eyes and focus on breathing in and out.
- Jump up and down.
- Count to 100…by 1s, 2s, or 5s.
- Count backward from 100.
- Draw a picture.
- Read a book.
- Listen to music.
- Dance!
- Ask an adult if you can play outside or go for a walk.
- Push against a wall. As you do, count to 10. Then do it again 3 more times!
Step 3: Relax!

Use your new space to spend some time relaxing today!
Don't forget to use it when you're upset, angry, or just need a couple minutes to yourself!

Adapted from Soar With Wings Family Activity 1
Field Trip Friday
Field Trip Friday

Last week you watched Chapter 1 of the Virtual Field Trip to The Tech Interactive, a world-famous science and technology center in San Jose, California.

Today you will finish watching Chapters 2-4.

Adapted from Tech For Tomorrow Virtual Field Trip Educator Guide
Virtual Field Trip

Watch Chapters 2-4 of the Virtual Field Trip.

As you watch, pay attention to what Robots can do for different industries.

Tech For Tomorrow Field Trip

Adapted from Tech For Tomorrow Virtual Field Trip Educator Guide
Post-Activity: Robotic Potential

Today you learned about several ways that robots are helping humanity:

They build important products, explore Mars, assist the military, improve healthcare, and more.

This Photo by Unknown author is licensed under CC BY-SA-NC.
Post-Activity: Robotic Potential

Follow the steps below as you consider:

What other problem(s) could robots solve to help make the world a better place?

Step 1: Collaborate
What problems exist in today's world? As you discuss with someone in your household, jot a list—no problem is too small or too large to include!

Step 2: Communicate
Review the problems that you brainstormed and select one problem that you will focus on. Be sure to choose a problem that, if solved, could make the world a better place.

Adapted from Tech For Tomorrow Virtual Field Trip Educator Guide
Post-Activity: Robotic Potential

Follow the steps below as you consider:

**What other problem(s) could robots solve to help make the world a better place?**

**Step 3: Critical Thinking**
Why is this a problem? What is not working? What needs to be solved? Do some research on your issue.

**Step 4: Creativity**
How could a robot(s) be used to solve or help solve this problem? Describe what the robot could be programmed to do and how this would help solve the problem. Think carefully about how the robot could impact people’s lives and/or the environment.

Adapted from Tech For Tomorrow Virtual Field Trip Educator Guide
References

"M" in STEM Monday
STEM Careers Coalition -
https://stemcareerscoalition.org/
  • https://tinyurl.com/hgokylc
  • https://tinyurl.com/gnsdnmm

Get Tech-y with it Tuesday
Manufacture Your Future -
https://www.manufactureyourfuture.com/
  • https://tinyurl.com/w9usutx

Workout Wednesday
AHA NFL PLAY 60 - https://aha-nflplay60.discoveryeducation.com/
  • https://tinyurl.com/v7bf8e8

Thoughtful Thursday
Soar with Wings -
https://www.soarwithwings.com/
  • https://tinyurl.com/SWWFA1

Field Trip Friday
Tech for Tomorrow -
https://techfortomorrow.com/
  • https://tinyurl.com/TFTVFTGuide

Weekend Challenge
Siemens STEM Day -
https://www.siemensstemday.com/
  • https://tinyurl.com/SSDActivities