



Daily DE

— ELEMENTARY GRADES 3-5



Week 6: 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.



Bring Science Home!
Simple, at-home STEM experiments

[LEARN MORE](#)

3M Science. Applied to Life. Discovery EDUCATION

WEEKEND CHALLENGE

3M is committed to helping educators, students and parents as they adapt to a new way of learning with Science at Home—easy experiments that reinforce core science principles.

[3M Science at Home](#)



The "M" in STEM Mondays

Entrepreneurship

Have you ever heard this saying?

You need to spend money to make money.

What does it really mean? Why would you have to spend your own money in order to make more? Today we're going to learn about **entrepreneurship** and think about our own business plans as we learn more about the phrase above!



Entrepreneurship

Let's start by taking a look at another video from Cha-Ching Money Smart Kids. This time we're going to be hearing Sweet Pepper's story as she tries to start her first business and create a business plan. As the video plays, keep a special eye on the red chili pepper in the corner of the screen to figure out if Sweet Pepper has to spend money to make money or not!

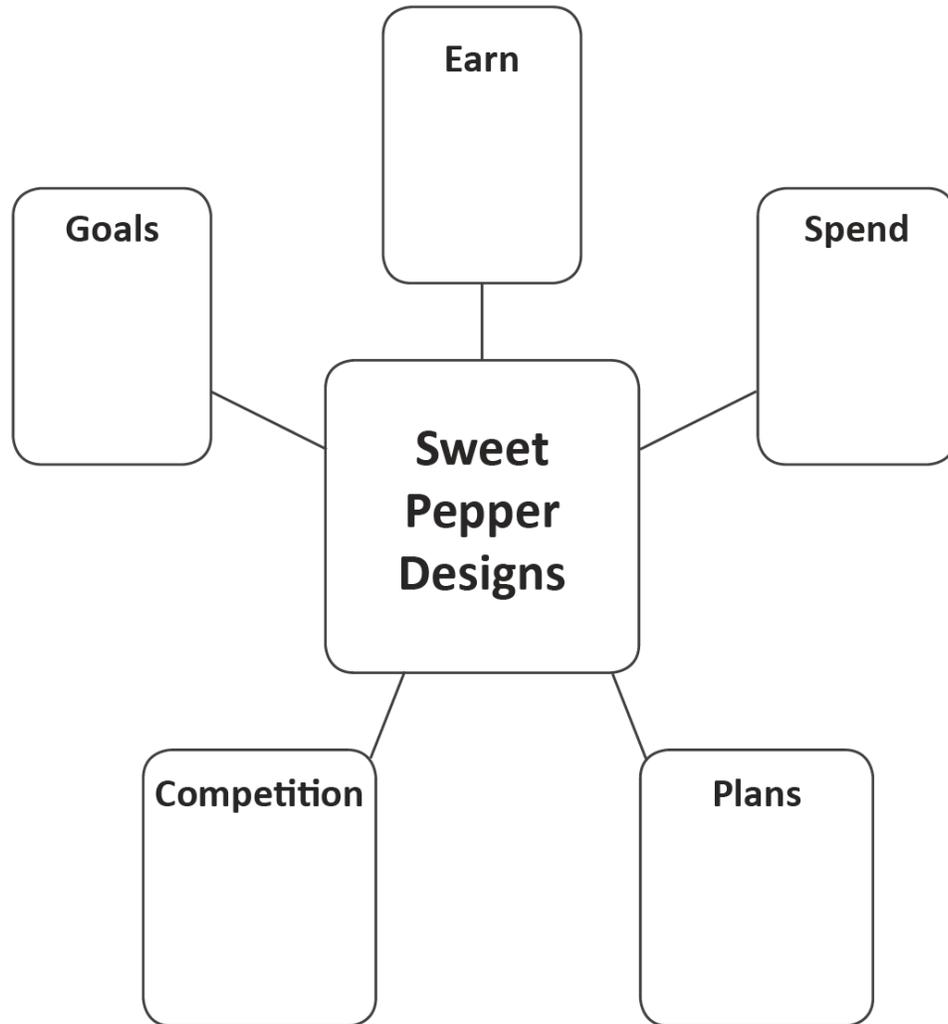


Episode 16

Sweet Pepper Designs

[Episode 16 – Sweet Pepper Design Video](#)

**Sweet Pepper Designs
Recording Sheet**



Entrepreneurship

SWEET PEPPER IS AN ENTREPRENEUR OR SOMEONE WHO THINKS OF AN IDEA AND THEN CREATES AND OPERATES THEIR OWN BUSINESS AROUND IT. WHILE THEIR GOAL IS TO MAKE MONEY, THEY MUST TAKE RISKS TO START THEIR BUSINESS TOO, INCLUDING SPENDING MONEY.

NOW THAT YOU'VE WATCHED SWEET PEPPERS BUSINESS JOURNEY, TAKE A MOMENT TO FILL IN THE GRAPHIC ORGANIZER ON THE LEFT. YOU MAY NEED TO WATCH THE VIDEO A SECOND TIME!



Your "M" in STEM Monday Weekly Challenge

**IT'S TIME TO TAKE ON YOUR ENTREPRENEUR SPIRIT
JUST LIKE SWEET PEPPER DID!**

**THINK ABOUT AN IDEA FOR A NEW BUSINESS. WHAT
WOULD YOU CREATE AND SELL? HOW MUCH WOULD IT
COST TO GET STARTED? WHAT PRICE WOULD YOU
SELL FOR?**

FOLLOW THE STEPS BELOW TO GET STARTED:

1. Determine a need or a want in your community. Think of a solution to meet that need. What is it called? What does it look like?
 2. Design a blueprint for your item to sell.
 3. Identify the goal for your business.
4. Answer the questions on the next page to help you craft your own business plan!

Your "M" in STEM Monday Weekly Challenge

Use the business plan started on the left to help you organize your thoughts. Then, share your idea with your parents, family, and friends! Get their feedback to help put your plan into action.



Money Smart Kids!

Discovery EDUCATION | JACKSON CHARITABLE FOUNDATION

Business Plan

GOAL

Our business goal(s): _____

FINANCES

| SPEND | EARN |
|----------------------------------|-------------------------|
| We would need to spend money on: | We would earn money by: |
| | |

COMPETITORS

Explain who might be your competitor (someone who could take business away from you):

FEEDBACK

The feedback our classmates had for our plan was:

REEVALUATE

Based on the feedback we received, how could we change our original idea, so our business might be more "successful?"



BONUS CHALLENGE: The 2020 Money Smart Kids Contest is open to educators, parents, and community members! Vote daily on behalf of your school for the chance at \$10,000 to put toward financial education and \$1,000 to donate to the charity of your choice.

Adapted from [Cha-Ching Money Smart Kids](#)



Get Techy with it Tuesday

Spacewalk Fashion

Clothes are important to us. They help people express who they are and how they are feeling.

Think about your favorite outfit or piece of clothing... What do you like most about it? How does it make you feel? Why is it your favorite?



Spacewalk Fashion

For the most part, we get to choose the clothes we make and wear here on Earth, but have you ever thought about what you'd wear if you were going to Outer Space?

In this "Get Techy with it Tuesday" you are going to look at the technology of fashion, particularly for those who do not live here on Earth, but rather are working in Outer Space!

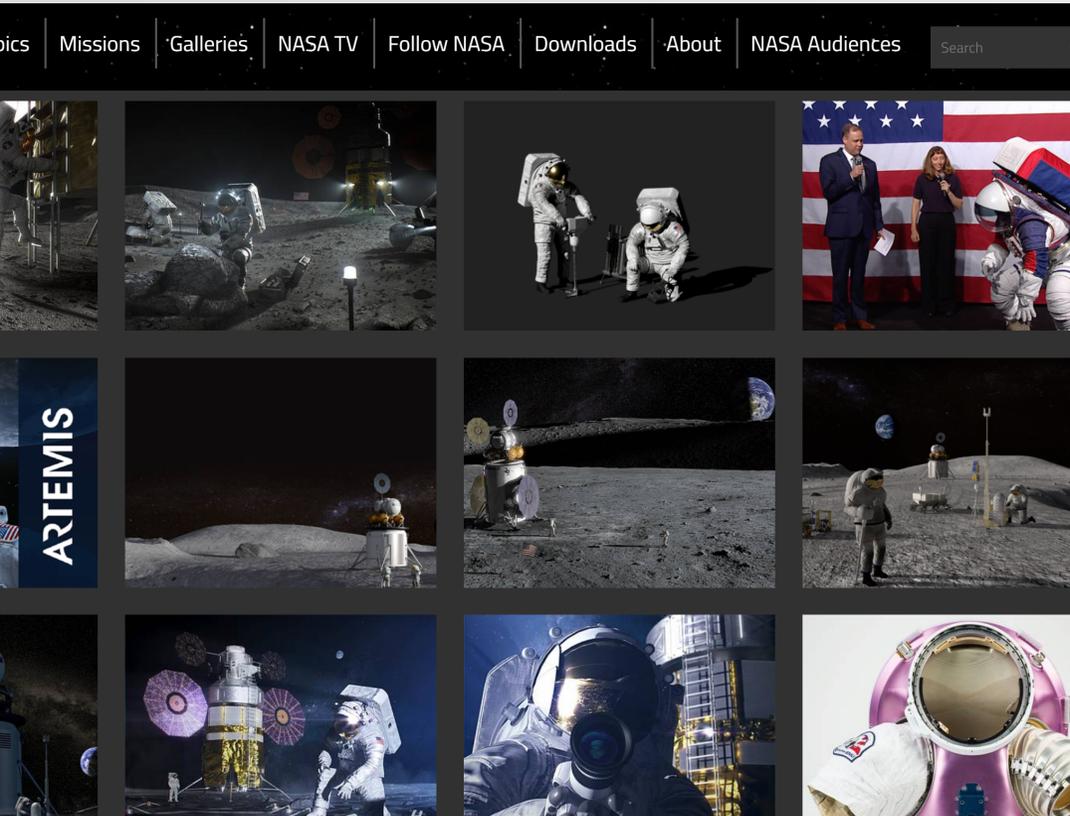


Spacewalk Fashion

Astronauts wear a space suit when they travel to Outer Space. Space suits help astronauts feel like they are still on Earth.

For instance, every space suit has a special backpack called the Primary Life Support System (PLLS), which holds an oxygen tank and a system to keep the astronaut cool. Astronauts also wear special EVA gloves that protect their hands from debris and extreme temperatures. From head to toe, every part of a space suit has an important job. Let's learn more about the parts of a space suit by checking out the images on NASA's spacesuit gallery.

[Spacesuit Gallery Link](#)



Spacewalk Fashion

The following cards show space suit parts. Read about these to note which parts you'd put on your own space suit design.

PLSS

PLSS stands for *Primary Life Support Subsystem*. This means that the PLSS helps astronauts survive in outer space!

The PLSS looks like a backpack. This very important backpack holds:

- an oxygen tank to help the astronaut breathe
- equipment to help the astronaut stay cool
- a two-way radio to help the astronaut speak with other astronauts and people on Earth
- a warning system that lets the astronaut know if anything is wrong with the space suit
- a battery to power the space suit



Hard Upper Torso

This section of the space suit covers the astronaut's torso, which is the chest and back. The hard upper torso is a strong vest made of fiberglass. Fiberglass is a material that some cars are made of!

The hard upper torso:

- protects the astronaut's chest and back
- connects to a device called a control module. This control module is like a remote control. The astronaut uses this remote control to make sure his/her space suit stays safe and cool. This control module connects to the front of the hard upper torso
- connects to a device called the PLSS or *Primary Life Support Subsystem*. The PLSS is controlled by the control module and helps the space suit stay safe and cool. The PLSS connects to the back of the hard upper torso.



Spacewalk Fashion

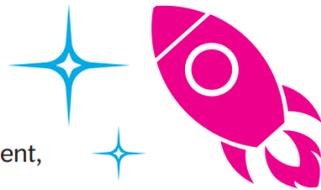
The following cards show space suit parts. Read about these to note which parts you'd put on your own space suit design.

EVA Gloves

EVA stands for extra-vehicular activity, so these gloves are used when the astronaut is outside of the spaceship!

EVA gloves connect directly to the space suit's sleeves. The gloves are thick and stiff and have many layers. EVA gloves must:

- protect astronauts' hands from space's high and low temperatures
- protect astronauts' hands from any space debris (small pieces of rock, dust, etc.) that could harm them
- be made so astronauts can move their fingers because astronauts need to be able to use equipment, pick up objects, and even walk with their hands



Lower Torso

This section of the space suit covers the astronaut's legs and feet with pants and boots. A special seal connects the space suit's lower torso to the hard upper torso.

The lower torso:

- has joints at the knees and ankles. These joints help the astronaut's knees and ankles bend a little more easily.
- has rings that tethers can attach to. Tethers are cords that connect the space suit to the spaceship so the astronaut won't float away
- often has a unique design to help other astronauts tell who is wearing each space suit



Spacewalk Fashion

The following cards show space suit parts. Read about these to note which parts you'd put on your own space suit design.

Communications Carrier Assembly (CCA)

The CCA is a cap that astronauts wear under their helmet. The hat has headphones built into the ear area. It also has a microphone that goes near the astronaut's mouth. The headphones and microphone connect to a radio that is on the astronaut's space suit.

Thanks to this cap, astronauts can:

- speak with other astronauts and people back on Earth without using their hands
- hear warning sounds that tell them if something is wrong or needs to be fixed



Lower Torso

This section of the space suit covers the astronaut's legs and feet with pants and boots. A special seal connects the space suit's lower torso to the hard upper torso.

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- has joints at the knees and ankles. These joints help the astronaut's knees and ankles bend a little more easily.
- has rings that tethers can attach to. Tethers are cords that connect the space suit to the spaceship so the astronaut won't float away
- often has a unique design to help other astronauts tell who is wearing each space suit



Spacewalk Fashion

The following cards show piece of space suit parts. Read about these to note which parts you'd put on your own space suit design.

Liquid Cooling and Ventilation Garment

While most people on Earth wear extra clothing to keep them warm, astronauts wear liquid cooling and ventilation garments under their space suit to keep them cool.

This special outfit is made of stretchy material. The stretchy material is covered with over 300 feet of small tubes that go all around the astronaut's body. Cold water is pumped through these tubes to keep the astronaut cool.

This piece of clothing also has vents (small slits or cuts in the fabric) that help sweat leave the astronaut's body. This sweat is then recycled and put into the small tubes!



Wrist Wear

The wrist is a handy storage place!

One item astronauts usually wear on their wrist is a **wrist mirror**. A wrist mirror is helpful because there are many important controls on the front of an astronaut's space suit. Astronauts can't see these controls when they look down. However, if they place their wrist in front of their chest, they can use the wrist mirror to see them! The text on these controls is even written backwards so astronauts can read it in the mirror. (A mirror reflection of an object is always backwards.)

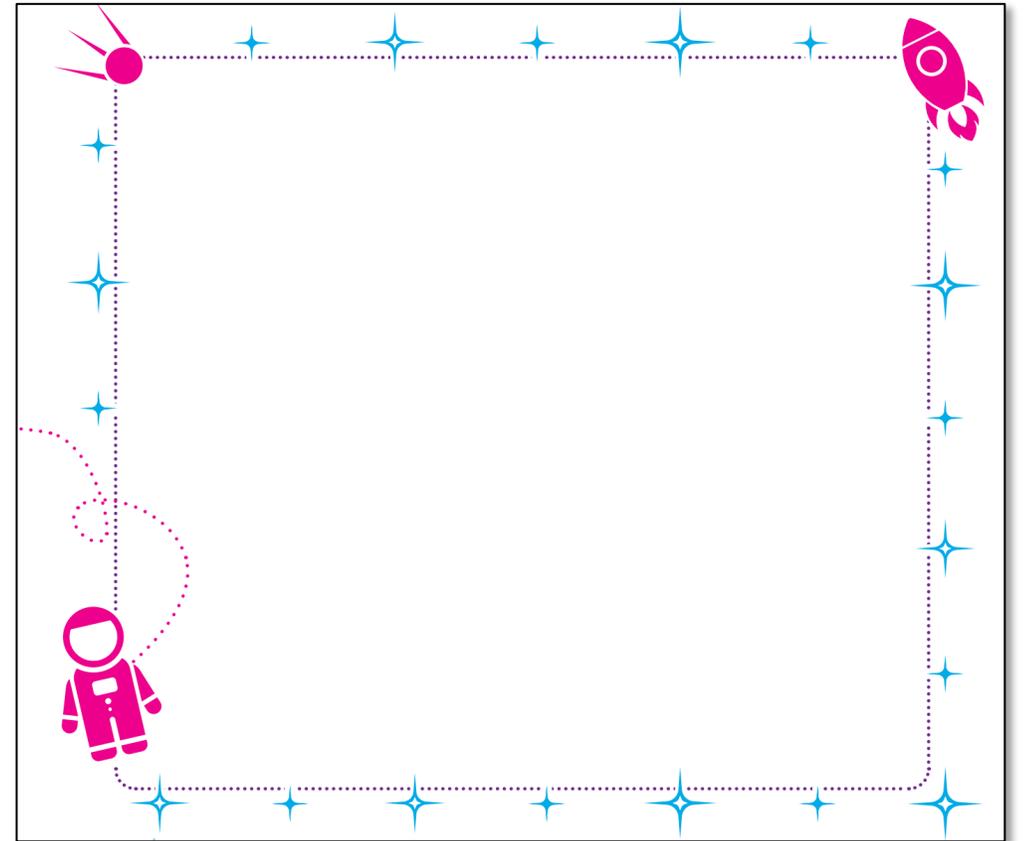
Astronauts also use their wrists to hold a **cuff checklist**. Astronauts can't carry around notebooks or phones to help them remember things. Instead, they create checklists that they can attach to their wrists!



Spacewalk Fashion

Now that you know about the parts that have already been invented to keep astronauts safe and comfortable, it's time to think how to improve one or make it even better!

- ✓ Grab a piece of notebook paper, a pencil, and a ruler.
- ✓ Sketch your new and improved space suit design.
- ✓ Label each part and its function.
- ✓ Make it personal! Add the aspects to it that would make you comfortable and excited to wear this space suit while up in Outer Space.





Workout Wednesday

Journey to Fitness



Wow! Your commitment to your fitness journey has continued to impress us week after week.



By now, you've collected a number of ideas for how to stay active and incorporate fitness into your daily routine. This week it's time to put it all together!



Create Your Own AHA NFL PLAY 60 Challenge

Think about the videos you've been watching and learning from. Take a second look at any video from the AHA NFL Play 60 Challenge media library and decide which moves you are going to put in your ultimate weekly fitness plan.



Y-NOT? 2:36 min. Join Ryan Kerrigan in a touchdown dance! Dancing is great for your body, it helps increase flexibility and coordination.



TOUCHDOWN DANCE 2:36 min. Join Ryan Kerrigan in a touchdown dance! Dancing is great for your body, it helps increase flexibility and coordination.



NFL PLAY 60 Challenge Heart Rate 3:33 min. Join NFL Linebacker, Whitney Mercilus, and Dr. Mercedes Carnethon, an American Heart Association volunteer, to learn about heart health.



Sideline-to-Sideline runs 2:19 min. These activities will help you to achieve 60 minutes or more of daily physical activity, build muscles and become stronger.



NFL PLAY 60 Challenge Strength 2:19 min. These activities will help you to achieve 60 minutes or more of daily physical activity, build muscles and become stronger.



NFL PLAY 60 Challenge Cool Down 1:37 min. After playing hard and racking up physical activity minutes, take time to try these cool down activities that gradually slow down your heart rate to help the

AHA NFL
PLAY 60 Challenges

Journey to Fitness

Time to revise your journey to fitness plan and put what you've learned into action.

1. Make a calendar with the days of the week.
2. Record the exercise/activity you'll plan for each day.
3. Add healthy food options!

| Mon. | Tues. | Wed. | Thurs. | Fri. |
|---------------|-------|------|--------|------|
| Exercise: | | | | |
| Healthy Food: | | | | |

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



[@DiscoveryEducation](#)

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.



Thoughtful Thursday

A Different Perspective

The past couple of weeks you have been learning about how to deal with **your** emotions and communicate with others.

This week, you are going to focus on **other people's** emotions and reactions.

You will interview someone to find out what makes them unique, and then write a story from their perspective.



A Different Perspective

Think about the two questions below.



Who are YOU?



*I understand others are **unique**.*

I want to learn more about everyone I meet.

I want to step into their shoes

and see what they are going through.

Unique: to be one of a kind and unlike anyone else!



How are you different from someone else?



Interview Time

We are all different and that is ok!

You are going to interview someone in your household to learn about what makes them unique.

First, on a sheet of paper write down at least 5 questions you want to ask.

Remember, you are trying to find out what makes them different!

Here are some ideas to get you started:

Ask about their likes, dislikes, secret skills, or hopes and dreams.

Then, ask your questions and record your partner's answer.

Story Time

Now that you've conducted your interview, you are going to take what you've learned about your partner to create a book cover.

You can do this on a blank sheet of paper.

Be sure to include:

- A title that helps the reader learn about your partner
- Pictures or words that show at least 3 ways your partner is unique.



A Different Perspective

Today, you learned how to ask questions to get to know someone and find out what makes them unique. When you take the time to learn about someone and think about what they've been through, you can relate to them more and understand their reactions.

Have you ever heard the expression:

"Before you judge someone, take a walk in their shoes"?

Do you think it literally means put on their shoes and go for a walk?

That would be funny- but that's not what it means! By taking a "walk in their shoes," you are thinking of things from their perspective.

You learned how to do that today by interviewing and getting to know someone, so that you can understand them better.

A Different Perspective

The next time you see someone react a certain way,

Step into their **SHOES**

I understand others are unique.
I want to learn more about everyone I meet.
I want to step into their **SHOES**
and see what they are going through.



Sound of voice

How they act

Outer appearance

Expression on face

Surroundings



Field Trip Friday

Field Trip Friday

Today you're going inside Cargill's Innovation Center in Wichita, Kansas where you will get an inside look into the world of **agriculture** and learn how careers in science and technology play a key role in getting food to your table in a safe and affordable way.

You will hear from numerous Cargill employees that represent a variety of interesting careers from a Food Marketer to Food Scientist and more!



Before you watch...

Have you ever wondered how food makes it from the farm to our kitchen table?

What about who is working behind the scenes to make sure that the food products that nourish us are raised responsibly, packaged safely, and sustainable?

Agriculture is the art and science of cultivating the soil, growing crops, and raising livestock.

It includes the preparation of plant and animal products for people to use and their distribution to stores.



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Field Trip Friday

Write down your answers to the following questions on a piece of paper as you watch the Virtual Field Trip:

1. What types of jobs are there in agriculture?
2. What type of science and technology do you see that helps get food from the farm to the store?
3. How does food get from the farm to the store?

Access the field trip here:

[AgExplorer VFT](#)



After you watch...

Imagine you're walking through a grocery store.



As you walk through each aisle, you look at the different products available for purchase.

From vegetables to yogurt and cans to bags, food packaging looks very different.

In large part, that's because food packaging has to accomplish many different goals.

Discuss with someone in your household:

Why do you think they package grapes in a bag and strawberries in a container?

Play the Part!

You work for a packaging design firm that has been called upon to perform a special task.

A food production company has installed a new CEO who wants to **limit the company's impact on the environment** by replacing the Styrofoam typically used in packaging their food products with a more **environmentally-friendly solution**.

Find materials around your household to design a package that meets the following goals:

- It must weigh less than 5oz. (the weight of a cell phone or deck of cards).
- It must fit 16oz of protein (like an egg).
- It must be water resistant and leak-proof.
- It must be stackable/easily transportable.
- It must be recyclable.



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References

"M" in STEM Monday

Cha-Ching - <https://www.cha-chingusa.org/>

- <https://tinyurl.com/ybzslodod>

Get Tech-y with it Tuesday

Girls Get STEM - <https://girlsleadstem.com/>

- <https://tinyurl.com/ya6mxrm9>

Workout Wednesday

AHA NFL Play60 -

<https://aha-nflplay60.discoveryeducation.com/>

- <https://tinyurl.com/v7bf8e8>

Thoughtful Thursday

Soar With Wings -

<https://www.soarwithwings.com/>

- <https://tinyurl.com/SWWTTC35>

Field Trip Friday

Ag Explorer - <https://agexplorer.com/virtual-field-trip/archive/2017-cargill>

- <https://tinyurl.com/SBYFVFT>

Weekend Challenge

Girls Get STEM - <https://girlsleadstem.com/>

- <https://tinyurl.com/GGSRRR>