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ASM International - Northeast Iowa Chapter	We plan to have two demonstrations. One is creating models of how atoms connect together using marshmallows and toothpicks. These will be in take-home bags. The other is an example of density, with several different objects of different densities.
Bayer Crop Science	Bernoulli principal demonstration, and vortex smoke rings. We will have the bottom of a trash can with a small hole cut out with a plastic cover over the other end. We will put some smoke inside the trash can and when you tap on the end with the plastic cover it will send out a vortex smoke ring.
Bayer Crop Science	We will have a display of several bottles of chemicals that would be harmful to ingest and some very common things that would be safe. We have the students try and guess by appearance which ones they think would be ok to eat or drink. We want to stress the importance of proper labeling and identifying of all chemicals and food.
Black Hawk County 4-H Program	
Black Hawk County Farm Bureau Agriculture in the Classroom	We will be making bracelets to teach what nutrients plants need and what they provide for plants. Also, we will have plants that show how they take up nutrients.
Cedar Valley Makers	Single coil motor kits electromagnetism demos, maker displays
Cedar Valley Society of Women Engineers [CV SWE] and John Deere	Making stress balls.
Central Rivers AEA	We will have different robots that are offered through Central Rivers for students to code and program to drive.

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Family Health Chiropractic	Let them see and move a working model of the spine. Offer free spine screenings so they can see the results. Send them home w/ a coloring project!
Girl Scouts of Eastern Iowa and Western Illinois	Learn robotics with the Girl Scouts! We will have ozobots, dolls on programmable scooters, and parts to build small robots.
Green Iowa Americorps (Land and Water Stewards)	Environmental Education.
Green Iowa AmeriCorps (Energy)	We will be bringing our energy bike, which is a bike connected to a light board that the kids will power and try and light up a variety of light bulbs. The purpose of the energy bike is to highlight how different types of lightbulbs (LEDs, CFLs, and incandenscent) use different amounts of energy and to get kids thinking about energy efficiency. The materials we will use will include the energy bike and light board which we will bring with us. We will not need access to an outlet.
Grout Museum District	Participants can make clothespin butterflies and interact with an animal friend from the Imaginarium.
Hawkeye Community College	Our booth will display a synthetic human. The SynDaver the most realistic synthetic representation of human anatomy ever produced.The SynDaver is complete with all bones, joints, muscles, organs and tendons in normal human anatomy. The visitors of the booth will put on gloves and be able to explore the human body on a guided tour with one of our Anatomy professors.

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Iowa Public Television	Kids will do a sorting challenge that speaks to recycling, composting and trashing items. We will talk kids through looking for the recycling triangle to reduce their trash by reusing items, compost and recycling. Kids will learn how reducing, reusing, and recycling can help them, their community, and the environment by saving money, energy, and natural resources.
Iowa Speedway	Kids will have the opportunity to build a Lego car and test their engineering skills on our 10ft ramp.
Iowa State Alumni of Black Hawk County	Our hands on activity will demonstrate building strength by testing the structural strength of triangles and squares. The students will use toothpicks and gum drops to test their theory of which shape is stronger Students will be able to build their own creative structures from gum drops and toothpicks. Each student can take their structures home.
ISG/Struxture	Building towers out of foam blocks and verifying their structural ability to withstand a horizontal wind force applied by fans. We may also incorporate a VR or drone systems that we currently use on our building projects.
ISU Extension Black Hawk County & FoodCorps	We need 2 booths but the there is 1 project that takes up more space.
ISU Extension Black Hawk County & FoodCorps	We will be creating "seed balls/seed bombs made from soil and loaded with seeds. These seed balls can be planted whole or dropped in plant friendly areas to provide plants for pollinators and wildlife. This is a hands-on activity where the kids will roll there on seed balls on site and decorate paper bags to take them home in.
John Deere INSPIRE	Tubulum and sound wave display

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John Deere Waterloo Works	Making Slime to review chemical reactions Materials used: contact solution, baking soda, glue, food coloring, sandwich baggies for kids to take home
K&W Electric, Inc.	We will have a trailer that the kids can walk through, which provides virtual reality simulation to different skilled trades jobs. Will also have a generator.
National Mississippi River Museum & Aquarium	The National Mississippi River Museum & Aquarium has some new animals that might give you the heebie jeebies. Come meet live insects and arachnids upclose and learn why they are awesome to have around!
Power Engineering & Manufacturing., Ltd.	We have a planetary gearbox that we use for demonstrations to show a 50:1 ratio. We have a kid turn the crank on the 50 ratio side and an adult turn the crank on the 1 side. The 50 side is easier to crank than the 1 so the kid is stronger than the adult. (I will be bringing an engineer with me so they can explain it better than I just did) We also have a clear Split Power Gearbox with colored gears that the kids can turn the cranks on.
Science Center of Iowa	We will be bringing a wide variety of science experiments that students of all ages can come and experience!
Society of Manufacturing Engineers	We will be displaying 1/4th scale tractor built by UNI Panther Puller's team. We will be also showing pictures and video of the tractor in operation by means of a projector. We will have students to answer any questions about the tractor and also SME Chapter Officers/members to talk about SME activities in the community. We will also have some stuff to give away and raffle tickets to win some gift cards.

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Tallgrass Prairie Center, UNI	We will bring table models of crop and prairie root systems made from twine and other materials, fuzzy craft balls to represent nutrients, and straws for participants to blow through to represent water flow. A tub on the other side of the table will represent Iowa streams and rivers. The goal for the participants will be to get the nutrients past the roots. The goal for the roots will be to capture the nutrients! A real prairie root specimen will be displayed for context.
TDS Automation, A Doerfer Company	We will be providing interactive kids level CAD software demos.
The Iowa Children's Museum	<p>ICM Staff: Staff will set up tech- decks &amp; materials to build a ramp for fingerboards.</p> <p>Students: Students will use the design cycle to build and test their ramps. Students can design their own skateboard deck too!</p> <p>Materials: Tech Deck, Fingerboards, Various blocks, Cardstock, Tape, Markers, Scissors</p>
Tri - County Child & Development Council, Inc.	Provide support for parents of pre - K children as they explore the two stations we will provide at the exhibit. These activities will be child directed. Children will be able to explore three sensory tables and create PVC models. Materials to be used include PVC pipes, sand, water and oobleck.
University of Iowa Department of Chemistry	We will bring some fun, safe chemistry experiments. We will use liquid nitrogen to free gummy bears and flowers, we will turn water into a solid, and we will learn how chemists work by making flubber. We have done these experiments before and know how to do them safely. We will use supplies that we bring, we do not need electricity.

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University of Iowa Health Care STEM Education	UI Health Care will be providing interactive medical activities led by current medical or other health professional students. Activities may include human organs that have been plastinated, laparoscopic surgery, or other medical activities to be determined. Kids and guests will have the opportunity to touch human organs, try their hand at minimally invasive laparoscopic surgery, or engage in other medical activities.
University of Northern Iowa - STEM	A UNI Mascot has been Panthermapped! Use multiple areas of science and technology to analyze the evidence left at the scene of the crime and reunite us with our beloved Panther!
University of Wisconsin-Platteville College of Engineering, Mathematics and Science	<p>Have you ever wondered how parachutes work? Come and learn about the physics of gravity and air resistance. Build your own parachute to test what you learn!</p> <p>[We'll have different materials (paper, plastic bags, string, yarn, etc.) to help kids build different parachutes. We'll also have a small step ladder to drop-test the parachutes.]</p>
Upper Iowa University	Have a Minute to Win it? Grab a partner or more and join in our Minute To Win It challenge with our education students, Upper Iowa University Center Staff and Professors. Will have 8-10 different games for all ages throughout the event!
Viking Pump	We will have a variety of hands on pumps along with a working display. One of our units will be tied to a computer to convert the number of times a kid turns the pump shaft over into a corresponding flow rate of Hershey Kisses pumped (or other Viking customer applications).
Wartburg College (Science Education)	There will be animals (tortoise, hedgehog, etc.). The students will make paper snakes (paper, glue/staples, and plastic eyes). There will be information about STEM at Wartburg College.

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Wartburg College - Public Health	3 activities to educate on important health issues: hand hygiene, heart health, and tobacco prevention. Hand washing: a bowl of water with pepper (germs) floating on top; when dish soap touches the surface, the germs (pepper) scatter. Heart health: fresh pig heart safely within a ziploc bag for observing/touching. Visual aid to teach the importance of exercise and a nutritious diet to cardiac health. Tobacco prevention: Mr. Gross mouth, plastic model showing the health effects of tobacco use
Waterloo Center for the Arts	design, build and race a wind boat. paper, scissors markers and straws.
Waterloo Fire Rescue	Rope rescue equipment again this year and adding a demo for a “HazMat ID Mass Spectrometer”.
Waterloo-Cedar Falls National Society of Black Engineers	
Bunger Middle	The Sphero is a robotic ball that can be controlled with a chromebook. Students will be able to create programs using drag and drop coding to control the direction of the ball. We will also have the Makey Makey that can make ordinary objects control a chromebook. We will have a piano made of bananas, bongo drums out of paper clips, and play doh driving the sphero.

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Bunger Middle	If the temperature of the ground will allow me to pull soil I will have one that is just dirt and one with grass. I will ask individuals what they think will happen when it rains over both surfaces? Then I will use a bioscape to show the affects on rural and urban areas when it rains hard and what happens to the things on the surface of Earth as they run-off to creeks, streams and rivers.
Cunningham Elementary	We will have pictures and models of solutions to problems that have been solved using only certain resources. Visitors will be able to choose a problem to solve and use provided resources to create a solution. (Not sure on the materials yet, it will depend on what the students decide).
Elk Run Early Childhood	We will provide pictures of familiar buildings from around the Cedar Valley. There will be paper/ pencil for the students to plan/draw how they would build the buildings from the picture. They will then be asked to put their plan into practice by using blocks and other building manipulatives to create their structure.
Lincoln Elementary - Waterloo	We will provide at least 5 different types of loose parts for children and adults to explore and use to create with
Lou Henry Elementary	Bloxels, Makey Make, iPads,

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Lincoln Elementary - Waterloo	We will have wooden cars and ramps. The visitors will test out the cars with ramps and complete challenges. We will also explain the concepts being used (kinetic energy, gravity, etc).
Lowell Elementary	We will be making Galaxy Slime. We will need small containers, glitter glue, baking soda, and contact solution.
Orange Elementary	
Poyner Elementary	Students will be given a challenge and asked to "invent" something to solve that problem. Materials to be used will be a variety of recycled items (newspapers, yogurt containers, lids, etc.) and masking tape - lots of it!
West High School	Microscopes, zebrafish eggs (hopefully), display on oak tatters, and research posters.
Waterloo Career Center	<p>For "Fizzing Colors" students will:</p> <ol style="list-style-type: none"> <li>1. Help fill a pan with baking soda</li> <li>2. Pour distilled vinegar into a few bowls and add food coloring to each</li> <li>3. Use medicine droppers, turkey basters, squeeze bottles to begin masterpiece</li> <li>4. Observe bubbles and fizz</li> </ol> <p>For "Rainbow in a Bag" students will see a demonstration of how the properties change in Skittles when water is added. They will take home directions and a handful of Skittles to try at home.</p>

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Waterloo Career Center - 3D Sound	Students will put on headphones and listen to simulated binaural sound (3D sound). I will explain to visitors what binaural hearing is and why it is so important to the way we live.
Waterloo Career Center - Advance Manufacturing	computer program's used in manufacturing, no hands on
Waterloo Career Center - Health Career Services	Blood pressure readings, demo on proper body mechanics when lift or transferring a person, visual and explanation of various medical equipment.
Waterloo Career Center - IT/Networking	Undetermined as of yet - will involve computers & possibly a tv
Waterloo Career Center - Marketing	General information regarding the Waterloo Career Center- what is it, programs available, etc.
Waterloo Career Center - Programming & Gaming	I will have students with me with a possibility of two to three activities, including programming a simple traffic light using Arduino, programming a computer game, and/or a mobile phone game.
Waterloo Career Center - Sustainable Construction	Destructive Material Testing breaking boards, checking for structural integrity.
Blessed Maria Assunta Pallotta Catholic Middle School	Come and see how an imagination mixed with great coding skills can bring about fantastic projects.
Saint Edward School	Code a robot to complete a variety of challenge tasks, think through the process of solving a puzzle in AR, or design an object in a 3D world.
Blessed Sacrament	Guide a robot through a challenge course of obstacles.
Sacred Heart	Students will be showcasing how to code using Scratch Jr. on the iPad to make interactive mini games.
Cedar Falls High School	The students running the exhibit will have paper rockets that kids will be able to either build there or take home and build.
Holmes/Peet Junior High	

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Cedar Falls CAPS	
Lincoln Elementary - CF	
Hansen Elementary	
Kittrell Elementary	We will exhibit what the students have learned in Jr. Lego League. We may possible have Legos for kids to build. They would not be able to take them.
Waterloo High School Robotics	FTC and FRC robotics team, driving robots and talking about the competition team.
Denver Cybots	We will demonstrate our robot and let kids drive a robot.
East Buchanan Robotics - FTC	Kids will be able to drive and operate the team's robot for the current FTC season, as well as we will have a basic programming activity (using cards and a game board rather than a computer) available for the table as well.
FTC Robotics Team 5445	Youth can operate the robot using remote controls and assistance from the robotics team members. Youth can also ask questions about why robotics programs are important and team members can ask those questions.
Black Hawk County 4-H Lego	Lego solutions. I am wanting to register for 2 tables for 4-H and 2 for my Lego teams. Thanks, Diane