4-H at Home

ON THE GO LESSON

4-H CLOVER KIDS

INCLUDES

YARN | JUMBO STRAW | PIPE CLEANERS | TISSUE PAPER
ENGINEERING DESIGN PROCESS POSTER

RELATED TOPICS

LEADERSHIP | STEM

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INCLUDED SUPPLIES

- *Yarn*
- *Jumbo Straw*
- *Chenille Stems (Pipe Cleaners)*
- *Tissue Paper*
- *Engineering Design Process Poster*

ADDITIONAL SUPPLIES

- *Tape*
- *Scissors*

BACKGROUND

Today, we are learning what makes a super superhero! Do you have a favorite superhero? What are their superpowers? Do you know any real-life superheroes? Real-life superheroes are the people in your community who help others. Who are the superheroes in your community? They might be doctors, nurses, police officers, firefighters, teachers, or even a kid in your class. What are some special things that make you are real-life superhero?

Listen to the book Ten Rules of Being a Superhero by Deb Pilutti. You can find the book being read online at https://www.youtube.com/watch?v=WyzHDKa0a3M. One of the ten rules is that every superhero must have a superpower. If you could choose any superpower, what would you choose? How would you use your superpower to help others?

DO REFLECT APPLY

In the story, we learned that Captain Magma has three superpowers. He is really strong, has lava vision, and a friendly personality, but he wishes he could fly. Since Captain Magma can't fly, your challenge is to use the supplies provided and a variety of household items to build a zipline to help him reach the villain's hideaway, stop their evil plan, and save the day. Use the Engineering Design Process to design and build a zipline that can move Captain Magma at least three feet. First, tape one end of the yarn to a tall object in your home, like a countertop. You may want to

string a small piece of straw on the yarn to help your superhero guide down the zipline. Then, secure the other end of the yarn to a lower object like the floor or a chair. Create your superhero using the chenille stems, tissue paper, or other household items, the possibilities are endless! Next, attach your superhero to the piece of straw and test your zipline. Did it work as planned? Did your superhero travel at least 3 feet to the bottom of the zipline? What changes can you make to improve your design? Reimagine, build, and test your design to see what works best. Engineers use the Engineering Design Process to solve problems just like you did! When else might you use this process?

Today, we learned that real-life superhero are people who help others in need. With your family, talk about something nice you can do for someone in your community! Here are some ideas: donate clothes and toys you've outgrown, take food to a local food pantry, draw pictures for residents at a nursing home, or make thank you cards for the helpers in your community.

Written by Nicole Hanson, ISU Extension and Outreach 4-H Clover Kids Specialist

LEARN MORE

For more information about the Iowa 4-H Clover Kids program, please visit https://www.extension.iastate.edu/4h/iowa-4-h-clover-kids.

To get involved with Clover Kids in xCOUNTYx County, please contact xNAMEx, County 4-H Youth Coordinator, for more information.

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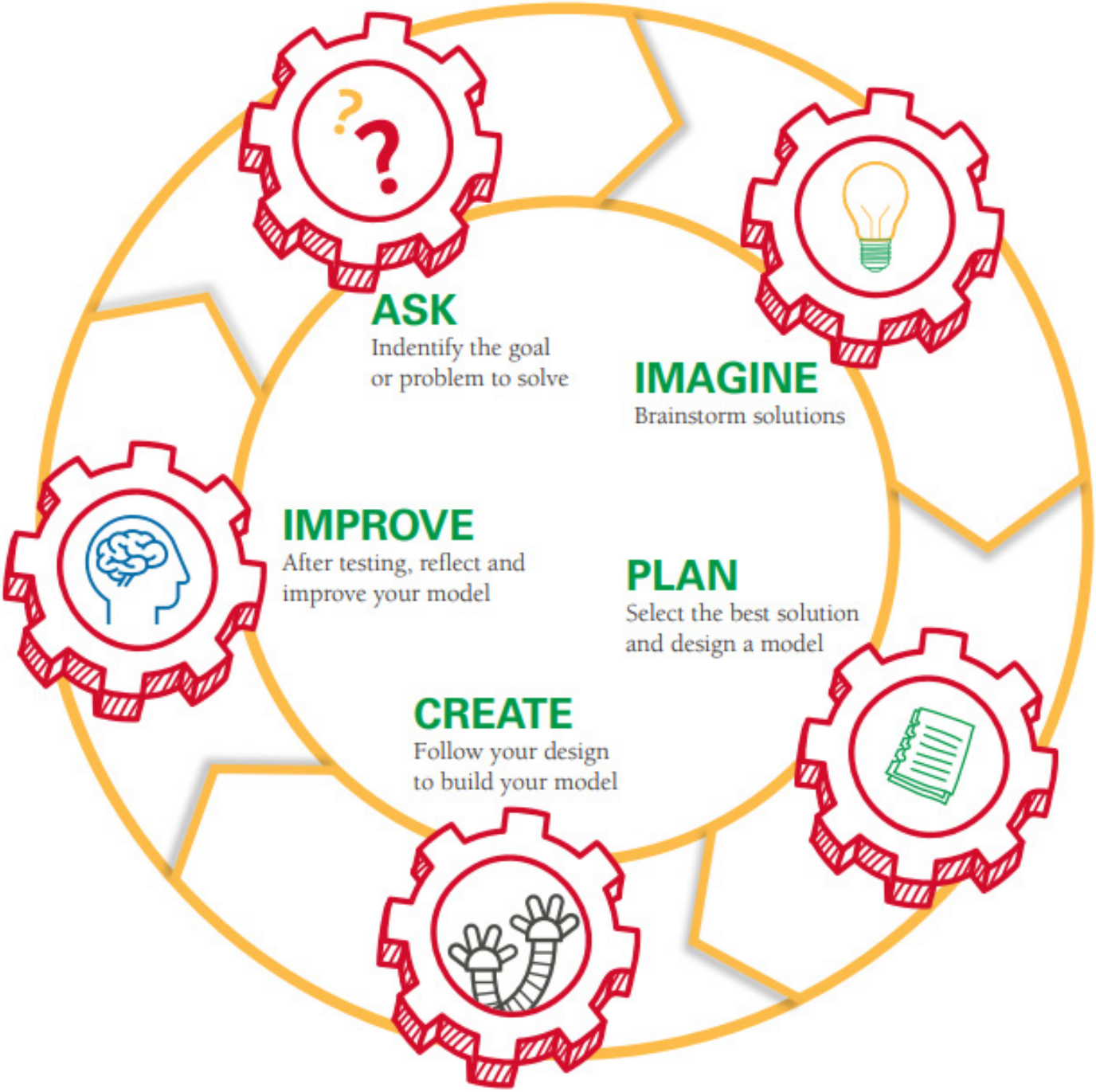
ENGINEERING DESIGN PROCESS



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