



LESSON PLAN

EVENT: Virtual Challenge

GRADE: K-8

LESSON TITLE: Cool Kitchen Tools

GETTING YOURSELF READY	
<p>Materials:</p> <ul style="list-style-type: none"> Paper Pencil Kitchen Utensils Markers, colored pencils or crayons 	<p>Agenda:</p> <ul style="list-style-type: none"> Introduction- Brainstorming Think and Share Activity Submit idea
<p>Objective: Students will be able to describe and apply the brainstorming process. They will brainstorm and analyze an everyday kitchen utensil, repurpose it, add to it, subtract to it, and create a new use for it.</p>	
<p>Proving Behavior: Students will complete the design challenge by creating solutions to a problem using everyday tools and materials.</p>	
CONTENT	
Activity	Description and Steps
<p>Introduction: Brainstorming</p>	<p>Brainstorming is an important part of the design and invention process. There are many ways to approach brainstorming, but really, it's just thinking up new ideas. It's always a good idea to have a notebook, inventor log/journal, or just some sheets of paper around so you can write down your ideas as you think of them, that way you won't forget as you think of new ideas.</p> <p>Many people do not know where to start when brainstorming. There are so many ideas out there. One method inventors use is called SCAMPER. Scamper is a mnemonic device or a tool to help you get started. Each letter in the word SCAMPER stands for a prompt that can help us brainstorm. See SCAMPER image on page 3.</p> <p>For today's challenge, you need the following:</p> <ul style="list-style-type: none"> Paper or notebook for taking notes Pen or pencil A kitchen utensil (ask an adult)- spatula, wooden spoon, colander, measuring cup, etc. Markers, colored pencils or crayons

<p>Think and Share</p>	<p>Today, you will take an ordinary utensil from the kitchen and make it into a new tool.</p> <ol style="list-style-type: none"> 1. First, take the utensil that you borrowed from your kitchen. Look at it from all angles. Hold it, turn and twist it, think about it. 2. How is it used now? (common use) 3. But let's get creative....how could it be used? 4. Take a few minutes to think and share...write down any idea that comes into your brain about how you could use this tool in a new way. Make a list of your ideas. 5. If you can, share some of your ideas with an adult, a sibling or someone else at home. 6. Then, choose your favorite or best idea and circle it on your list.
<p>Activity: Cool Kitchen Tools</p>	<p>You have your idea for a new use for your kitchen utensil. Now comes the fun part- designing.</p> <p>So here's your YIP Challenge for today:</p> <p>Take some time to draw and design your new tool based on the everyday kitchen utensil. You can use markers, pencils, or crayons. Your design should show how your new tool is used and what it does.</p> <p>Label the different parts of your tool, showing what you added, took away, or how you changed the tool to become something new with a new use. And, if you want, and it's ok with your family, you can build your design with materials at home to see if it works!</p> <p>Once you have your design (the drawing or the model), you can submit it to us to complete the YIP@HOME Challenge.</p>
<p>YIP CHALLENGE SUBMISSION</p>	
<p>TO SUBMIT YOUR DESIGN:</p> <p>Take a photo, or scan and upload a picture of your drawing or design.</p> <p>Email it to your teacher or to us at: hello@aes-world.org</p> <p>Or tag us on Instagram: @FueltheSpark.</p> <p>We can't wait to see your awesome ideas!</p>	

S.C.A.M.P.E.R. for Brainstorming

S

SUBSTITUTE:

Replace a thing, or concept with something else.



C

COMBINE:

Unite! What? Who? Ideas? Materials?



A

ADAPT:

Adjust to a new purpose. Re-shape? Tune-up?



M

MODIFY, MAGNIFY, MINIFY

Change the colour, sound, motion form, size.

Make it larger, stronger, thicker, higher, longer.

Make it smaller, lighter, slower, less frequent, reduce.



P

PUT TO ANOTHER USE:

Change when, where, location, time, or how to use it.



E

ELIMINATE:

Omit, get rid of, cut out, simplify, weed out...



R

REARRANGE, REVERSE

Change the order, sequence, pattern, layout, plan, scheme, regroup, redistribute...

