

Summer Bridge Camp Break Out Room Instructions  
Monday, July 27<sup>th</sup>, 2020

**Duration: 1 HOUR(feel free to give students a 5 minute break if needed). Supplies: printing paper/construction paper, paper plates work too, scissors, tape. (NO GLUE ALLOWED). NO More than 6 pieces of anything allowed; must be paper or paper plates. (no more than 6 pieces)**

**STEPS 1 to 3 during the first 15 minutes**

**Step 1:** Introduce yourselves in the break out room and add a question: You may add another question to the introduction, such as how many siblings do you have or what campus did you attend before?

**Step 2:** Go over norms with the group for break out rooms

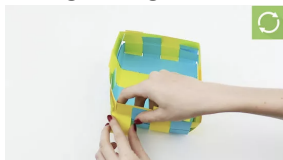
- Respect each other's ideas and opinions
- Everyone participates
- cell phone turned down/background noise to a minimum as much as possible

**Step 3:** Come up with a team name (you can facilitate this however you like)

**Steps 4 and 5 during the next 30 to 40 minutes. STEM CHALLENGE: PAPER BASKET!**

Step 4: Re-read the STEM Challenge scenario and begin going through the steps of the engineering process. (You can give students roles depending on who has supplies (time keeper, leader/facilitator, builder, supporters). Students all participate in the steps of engineering process. It's ok if they don't have supplies.)

You are stranded on an island and have to find out what is available to eat on the island. As you explored the island, you found some fruit in a tree. But you can see that a dangerous storm is coming. You must pick the fruit quickly and put it in a container so that you can carry it back to safety. You have nothing to carry the fruit in. All you have is some paper, tape, and scissors. Create a paper basket that is strong enough to hold the fruit.



Engineering Design Process

- Ask (ask or define the problem)
- Imagine
- Plan
- Create
- Test
- Improve

**Step 5:** Decide whose basket or whose final product will be shown to the whole group when we leave the break out rooms/which students will speak. (Each group will share out: 1. Each group tells us what their team name is: 2.) Each group names each stage of engineer process and describes how they worked. 2. Show your final results and explain how well you think it would work and how you would improve it.

**Step 6: Last 10 to 15 minutes of break out room:**

**Step 6:** Social/Emotional Discussion: ask students: How do you feel about starting the school year? Or what are some of your feelings about starting middle school?

Leave breakout room

## Summer Bridge Camp Break Out Room Instructions

Tuesday, July 28<sup>th</sup>, 2020

**Duration: 1 HOUR(feel free to give students a 5 minute break if needed). Supplies: cell phone or ipad/for Internet if they have access. Paper, something to draw with. (colors are optional)**

### **STEPS 1 to 3 during the first 10 minutes**

**Step 1:** Introduce yourselves in the break out room and add a question you didn't do yesterday: What do you want to do when you grow up? Or How do you see yourself making an impact in the world?

**Step 2:** Go over norms with the group for break out rooms

---Respect each other's ideas and opinions

---Everyone participates

---cell phone turned down/background noise to a minimum as much as possible

**Step 3:** Remind students of team name

### **Steps 4 and 5 during the next 30 to 40 minutes STEM Challenge: COOL DOG HOUSE!**

**Step 4:** Re-read the STEM Challenge scenario and begin going through the steps of the engineering process. (You can give students roles depending on who has supplies (time keeper, leader/facilitator, builder, supporters). Students all participate in the steps of engineering process. It's ok if they don't have supplies.)

One day after school, you went for a walk around your neighborhood and found a lost puppy! The puppy had no collar or tag, so you decided to take matters into your own hands. You rescued this lost puppy from the side of the road, but you are not allowed to have your puppy in the house. The weather prediction is for a record-setting heat wave and you are worried about your puppy being outside in the heat, so you decide to build a doghouse to protect your puppy from the thermal energy of the sun. The nearby store is full of supplies that you can buy; now you just have to choose what materials you want to use to design and build the coolest doghouse for your puppy! From your saved allowances, you have \$12 to spend. Now you must carefully spend your savings to buy materials to build this doghouse!



## Engineering Design Process

- **Ask** (ask or define the problem)---stated above
- **Imagine**---ask students: How big does the dog house need to be? What would the dog house be made out of to keep the dog cool? Students use cell phones, or ipads/laptops to look up thermal materials to keep dog cool. How would you prevent leaking into the dog house? How would you prevent it from blowing over/falling down?
- **Plan** ----make a list of materials you would need to buy to build this dog house. (go arts crafts sites, google, home depot, etc (make sure students are doing this on their own).
- **Create**---draw and label the dog house, explaining each part. (students can color if they have colors).
- **Test** ---pretend to put the dog in dog house and talk with your peers on how you would test this out. (i.e thermometer for the temperature, etc.)
- **Improve** ----how would you improve this dog house? What is something you left out?

**Step 5:** Decide whose drawn dog house or whose final product will be shown to the whole group when we leave the break out rooms/which students will speak. (Each group will share out: 1. Each group tells us what their team name is: 2.) Each group names each stage of engineer process and describes how they worked. 2. Show your final results/drawing and explain how well you think it would work and how you would improve it.

**Step 6: Last 10 to 15 minutes of break out room:**

**Step 6:** Social/Emotional Discussion: What do you think a good leader is? Describe a time when you were a good leader. Describe a time when you feel you were not a good leader?

**OR** What is a true friend to you? Define friendship and tell me about a time you experienced good friendship/not good friendship.

Leave breakout room