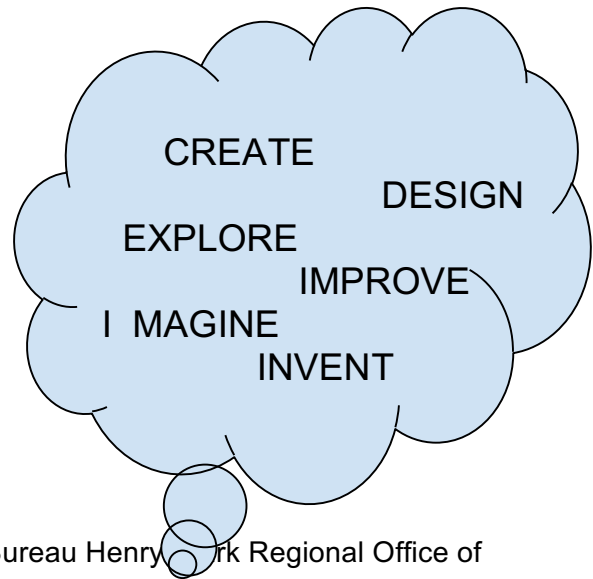


PLEASE JOIN US FOR

# **FAMILY ENGINEERING NIGHT**



**HOSTED BY:** The 21st Century Community Learning Centers grant. A partnership between the Bureau Henry County Regional Office of Education and Bureau Valley South.

**Discover the fun of engineering through hands-on activities for the whole family!**

**DATE: Thursday February 16, 2017**

**TIME: 6:00-7:00**

**PLACE: Buda (gym and cafeteria)**

- ❖ **Children grades 3-8 and their families explore engineering together**
- ❖ **Have fun with your family**
- ❖ **Prizes**
- ❖ **Free Admission**
- ❖ **Free Homework Pass**

## STEM NIGHT FEBRUARY 16, 2017

6:00-7:00

- STEM NIGHT WILL CONSIST OF 12 STATIONS IN THE GYMNASIUM
- STEM NIGHT WILL HAVE 3 LONGER ACTIVITIES TO DO
  
- STUDENTS AND PARENTS WILL GO THROUGH EACH OF THE 12 STATIONS.
- WHEN THEIR STATION IS COMPLETE THE STUDENT WILL GET A STICKER ON THEIR CARD.
- WHEN THEIR CARD IS FULL THEY WILL REDEEM THEIR PRIZE IN THE CAFETERIA
- WHILE IN THE CAFETERIA, STUDENTS AND PARENTS WILL WORK ON 2 OTHER ACTIVITIES THAT TAKE A LITTLE LONGER.

### ACTIVITIES:

#### BIG GYM (student led activities high school and junior high students)

1. Arches
2. Boxing Beans
3. Domino Diving Board
4. Glue is Clue
5. Tumbling Tower
6. Happy Feet
7. Learning from Failure
8. Who Engineered it?
9. Inspired by Nature
10. Picture This
11. Showerhead Showdown
12. Solid Ground
13. Thrill Seekers
14. Against the wind

#### CAFETERIA(teacher led activities)

1. Artistic Robots
2. Give Me a Hand
3. Team UP

## SUPPLIES FOR ACTIVITIES GYM (double supplies for another set for dual stations)

1. Arches- 2 cans of food, 11x17 paper, 4x12 strip cardstock, erasers
2. Boxing Beans- 1 cup dried beans, 4 preassembled shapes (cardstock, small paper cup, tray)
3. Domino Diving Board- set of dominoes, thick book(dictionary), ruler
4. Glue is Clue- 4 colored index cards(4x6), 2 of one color and 2 of another, 2 plastic cups 12oz or larger, 30 plus metal washers, container for washers
5. Tumbling Tower- 3 12x12 cardboard, 14 toilet paper rolls
6. Happy Feet- 5-6 single shoes depicted on activity cards, activity cards, design requirement cards, paper 12x24,
7. Learning from Failure- plastic container 6-8 in deep 12 in wide, aluminum foil 4 in squares, pennies in a bowl approx 50, paper towels or hand towel
8. Who Engineered it?- engineered product cards, set of engineer cards, sheet of paper 20 in long x 12 in wide
9. Inspired by Nature- set of human invention cards, set of Nature Inspiration cards, sheet of paper 12 x 42
10. Picture This- 2-3 pairs of scissors, 2-3 tape dispensers or scotch tape, copies of the design pages, 4 preassembled 3D shape examples
11. Showerhead Showdown- 2 clear 9 oz plastic glasses that are short 3" with a wide open rim, plastic container 6-8 in deep 12 in wide, water, hand towels, paper towels, trash can
12. Solid Ground- 3 plastic containers quart size, 1.5 cups of rough gravel pebble gravel sand, 3 large plastic lego duplo blocks or other same size
13. Thrill Seekers-8 ft long clear plastic tubing  $\frac{3}{4}$  in diameter, 5 small marbles, plastic wrap, rubber band, small plastic cup to hold marbles
14. Against the wind- 4 cars matchbox, index cards, ramp, books, small clip on or box fan

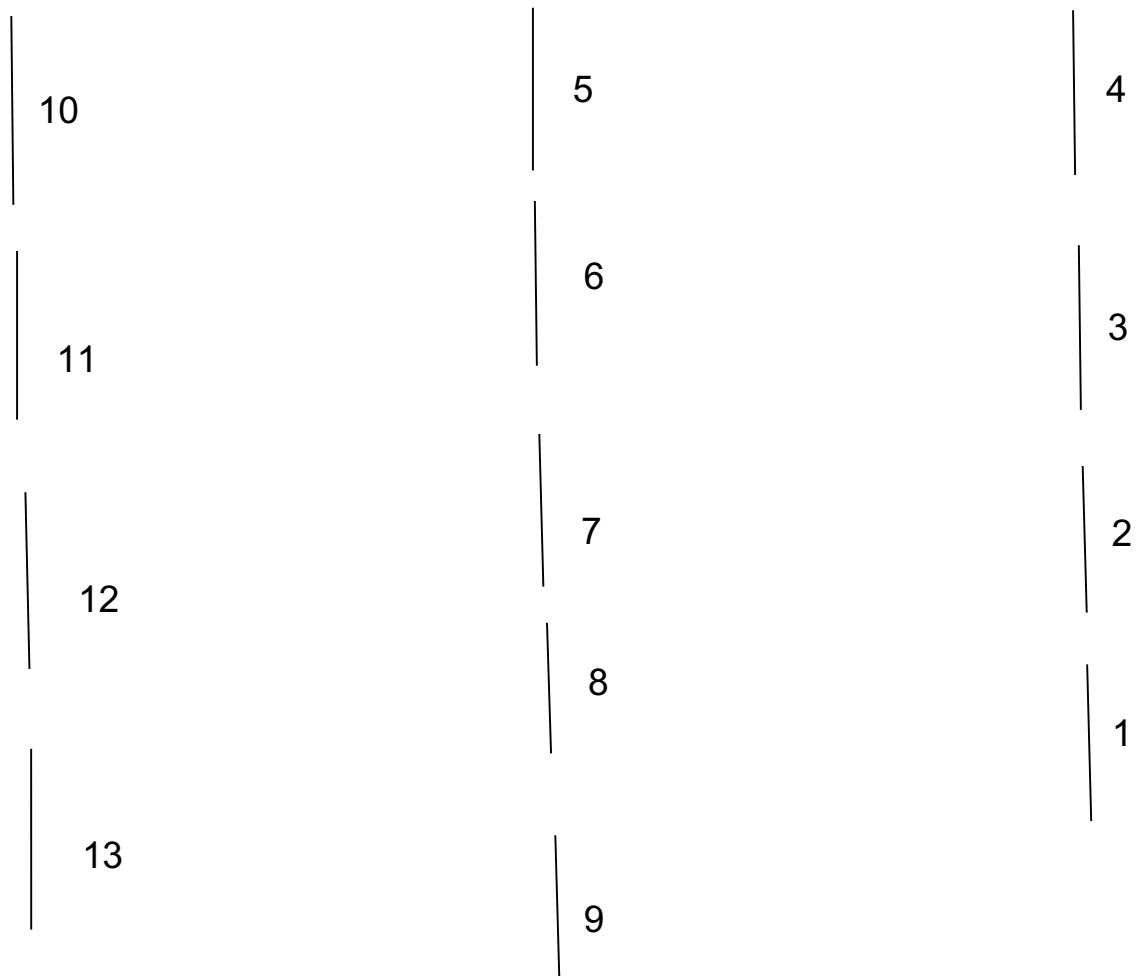
## ACTIVITY SUPPLIES (CAFETERIA)

1. Give Me a Hand- Per bag(six craft sticks, eight rubber bands, three paperclips, two index cards, a plastic spoon, and a plastic fork.
2. Artistic Robots- per bag( 1.5 V motor with wire leads, AAA or AA battery, large plastic cup(thin plastic works best), 3 water-based markers, to drinking straws, two rubber bands, two craft sticks, two paperclips, one eraser, one pencil, and 2 to 3 sheets of 11 x 17 white paper.
3. Team Up!-teacher lead activity- per bag(20 pipe cleaners)

**FAMILY  
ENGINEERING NIGHT  
MAP TO ACTIVITIES  
COLLECT ALL !\$ STICKERS AND RECEIVE A PRIZE  
BIG GYM**

\_\_\_\_\_ door \_\_\_\_\_

\_\_\_\_\_ door \_\_\_\_\_



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**14 STAGE**