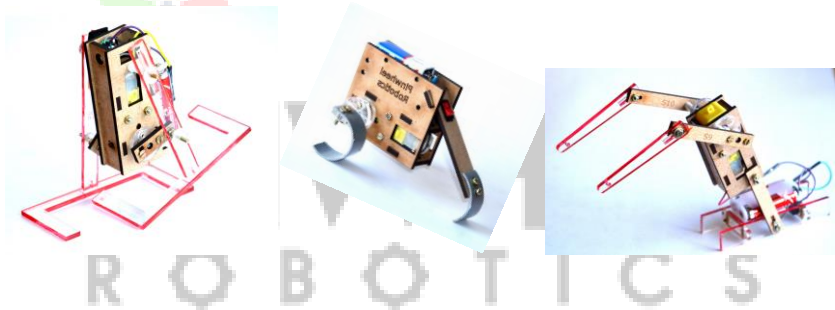


# ART & CRAFT CREATIVE ROBOTICS

14<sup>th</sup> & 15<sup>th</sup> December, 2019



[www.pinwheel.in](http://www.pinwheel.in) [www.pwbotics.wordpress.com](http://www.pwbotics.wordpress.com) contact us at [admin@pinwheel.in](mailto:admin@pinwheel.in)

# Activity 1: Build a Frog Robot using Art & Craft Materials

## Materials Required:

- a. High Density Foam Board or Cardboard
- b. Bamboo or Wooden Skewer Sticks
- c. Glue Stick
- d. Paper Knife
- e. DC Motor, Switch ,Battery Clip ,9V Battery
- f. Connection Board/Box
- g. Pre-cut pieces
- h. Design Sheet
- i. Glue (Fevicol, Fevikwik-Gel based)
- j. Mini craft drill
- k. Hot Glue Gun
- l. Colours and drawing materials
- m. Ruling Scale

## Building Instructions :

- a. Stick the design sheet on HDF / Cardboard .
- b. Using Paper Knife Carefully ,cut out the design .
- c. Follow the class instruction to place these pieces together using hot-glue or permanent glue.

- d. Cut the Skewer sticks and insert them in the body.
- e. Using permanent glue stick the stick and pre-cut pieces as instructed in class .
- f. Stick motor, battery & switch using hot glue as instructed in class
- g. The instructor will help to complete the Frog Robot
- h. Use your own imaginative skills to paint and design your own Frog Robot!
- i. Have Fun!

## Activity 2: Build a Conveyor Belt using Art & Craft Materials in a Team

### Materials Required:

- a) High Density Foam Board or Cardboard
- b) Felt sheet
- c) Glue Stick
- d) Paper Knife
- e) DC Motor, Switch ,Battery Clip ,9V Battery
- f) Connection Board/Box
- g) Rolling connector piece
- h) Motor disc
- i) Design Sheet
- j) Glue (Fevicol,Fevikwik-Gel based)
- k) Mini craft drill

- l) Hot Glue Gun
- m) Colours and drawing materials
- n) Ruling Scale

### Building Instructions:

- a. Stick the design sheet on HDF / Cardboard.
- b. Using Paper Knife Carefully, cut out the design.
- c. Follow the class instruction to place these pieces together using hot-glue or permanent glue.
- d. Insert the rolling pieces (4 pieces) into one another to get two separate rollers.
- e. Using permanent glue, stick the slotted bottle cap over the circular acrylic disc over the motor shaft, as instructed in class.
- f. Wrap the felt sheet for the belt and glue it carefully.
- g. Stick motor, battery & switch using hot glue as instructed in class
- h. The instructor will help to complete the structure.
- i. Use your imagination to decorate your very own conveyor belt!
- j. Enjoy!

## Activity 3: Build a Bubble Shooter

### Materials Required:

[www.pinwheel.in](http://www.pinwheel.in) [www.pwbotics.wordpress.com](http://www.pwbotics.wordpress.com) contact us at [admin@pinwheel.in](mailto:admin@pinwheel.in)

- a) High Density Foam (HDF) Board / Cardboard
- b) Bubble Shooter disc
- c) DC Gear Motor, 9V Battery , Switch , Battery Clip
- d) Paper Knife
- e) DC toy Motor, Switch, Battery Holder, 2 AA Battery.
- f) Fan Connector for DC Toy Motor
- g) Connection Board/Box
- h) Design Sheet
- i) 300 ml Cold Drink Bottle
- j) Soapy Solution
- k) Glue (Fevicol,Fevikwik-Gel based)
- l) Mini craft drill
- m) Hot Glue Gun
- n) Colours and drawing materials
- o) Ruling Scale

#### Building Instructions:

- a) Stick the design sheet on HDF / Cardboard.
- b) Using Paper Knife Carefully, cut out the design.
- c) Follow the class instruction to place these pieces together using hot-glue or permanent glue.
- d) Connect the Fan to the DC Toy Motor
- e) Complete the circuit as instructed in the class
- f) Connect Bubble Shooter Disc to the Gear Motor
- g) Create Soapy solution
- h) Turn on the switch and start shooting bubbles !

- i) Using colours and imagination give a theme to your bubble shooter !

Notes:

