



Robo-Racer is an educational game for children. The concept idea of this game is to teach children basic anatomy of robots by having them build a robot from templates and then challenge the players with their creations on a game board. The competition would simulate some possible aspects of how robots work to accomplish their programming and real world solutions of how robots could be employed. Another main objective is to place a “seed” in the minds of students that Robots are a field of study they could pursue.

Robo-Racer is a game for 2 to 4 players.

Ages 10 and up

Pieces Needed for Game:

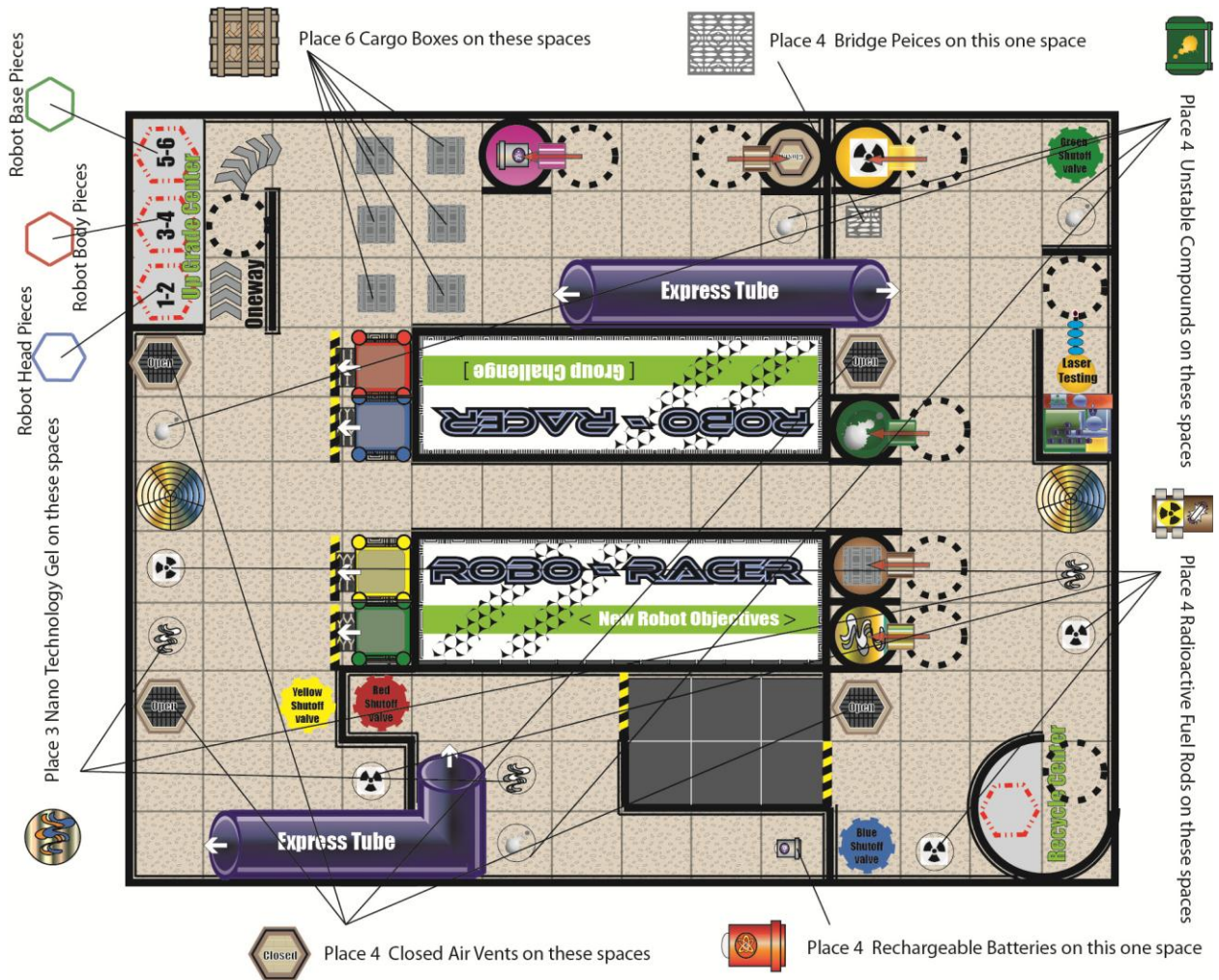
1. Game board (17” x 22”)
2. 6 sided dice
3. 4 colored game pieces that will represent the ROBOT moving pieces on the game board. Coloring the objects (RED, BLUE, YELLOW and GREEN) will help in identification and game play descriptions. They are helpful if not bigger than a Quarter.
4. Print the 9 sheets of the Robo-Racer Robots. Each sheet will need to be cut into the three sections of Robot Head, Robot Body, and Robot Base.
5. Print 1 sheet of Robot Up-Grade Center pieces and Game Board pieces. These will need to be cut out into the individual pieces.
6. Print 1 sheet of the Objectives A, Objectives B, Objectives C and Group. These will need to be cut into individual cards.

There are Three Phases for this game~

1. Game Board SET-UP
2. Build a Robot
3. Playing the Game

## Game Board SET-UP

Place the following items on the game board from the diagram below-



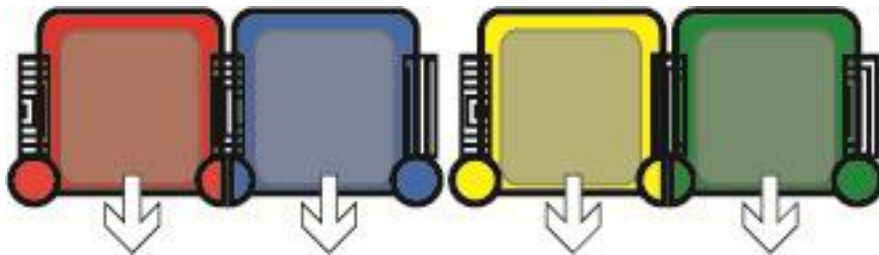
## BUILD A ROBOT

Players will want to do one of the follow choices for building a robot.

- A. Mix the Robot Head cards and turn them over so that they are upside down so it hides the choices. Do the same for the Robot Body cards and the Robot Base cards. Determine a starting player who will randomly draw a Robot Head card, Robot Body card and Robot Base card. Turn the cards over and assemble the head, body and base cards together. All words on the card should be in the same readable position.
- B. Choose a player to go first and have them browse through ONE of the three categories of Robot Sections of Head, Body and Base. After choosing one, the next player will choose a category and select a Robot Section. Continue this till each player has chosen a full Robot when assembled.

## Playing the Game

Each player will have a robot that will have a starting home on the game board. Take a color game piece that will represent your robot and place it in the Home location on the game board with the matching color.



Each turn players will roll the 6 sided dice and then move their robots the amount of spaces rolled. Robots do not need to move the full amount of spaces rolled.

**Note:** Robots that drop off items or perform functions and still have more spaces to be able to move can do so if desired.

**Objective Cards:** All Personal Objective cards and Group Challenges will be shuffled together and placed upside down on this location on the game board-



**Personal Objective Cards:** Players will want to obtain a Personal Objective card which can be picked up at one of the two locations marked by the following symbol:



Players that draw Personal Objective cards will want to fulfill those objectives stated on the card. Players can only have one unfulfilled Personal Objective card at a time and can get New Robot Objectives after they complete the one drawn. To win the game a player must be the first to have three completed objectives.

When completing a personal objective, the objects/items are placed in the yellow cargo circle on the player's robot body. Robots can carry only one item at a time unless otherwise stated on the Body card.

**Note:** Completing the **Up-Grade Challenge** is a Personal Objective that is worked on throughout the game and is the exception to the game rule of having no more than one unfulfilled objective at one time. By filling all upgrades for your robot it gives you an automatic fulfilled Personal Objective that counts towards your win requirements. Up-Grade Challenge is found on your robot cards of Head, Body and Base. You must maintain and be current of the finished Personal Objective to count it as a win when crossing the finish line.

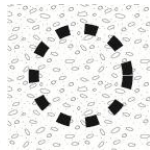
**Group challenge:** If players draw a Group Challenge it is placed on this location on the game board-

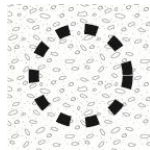


All players will read the card and fulfill any requirements stated before resuming their robot's current Personal Objective card.

**Note:** Group challenges are not Personal Objectives. It does not count toward the three needed Objectives to win the game.

**Up-Grade Center:** Players will want to visit often to get special abilities added to their Robot. These enhancements will affect game performance to completing Personal Objectives.



When players Robot lands on the  space at the Up-Grade Center they can roll the 6 sided dice to determine the type of Up-Grade.



Player draws a Robot Head piece.



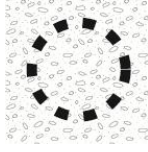
Player draws a Robot Body piece.



Player draws a Robot Base piece.




**Recycle Center:** When robots have unwanted upgrades they are placed in the Recycle Center on the game board. Any player that is interested in viewing the Recycle Center for possible upgrades can do



so by landing on the space at the Recycle Center and then browsing the available choices. Players can take one up-grade per turn of their choice. If this replaces an existing up-grade on the robot the unwanted piece goes to the Recycle Center as unwanted.

### Special Movement Considerations:

1. Robots cannot move diagonal on the game board.
2. Express Tube moves robots instantly to the next opening counting as only one space to use the Express Tube.
3. Robots can occupy the same space and move past other players on the same square.
4. Robots cannot move through the walls - 
5. Robots cannot cross over the PIT until the bridge is built.
6. Items in the game arena that belong to Personal Objectives cannot be moved by other players and robots cannot move onto those spaces that belong to that Personal Objective owner. Items removed on the game board from Personal Objectives will allow robots to move on those places as a regular pathway.

## To Win the Game

The first player to fulfill three Personal Objectives then race back to their Home Starting Box before any other player is the winner of the game.

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### To be worked on-

1. Printing sizes are not adjusted correctly to match existing board size. Scaling may be required to get the piece sized to cooperate.
2. Not enough personal objectives to accommodate 3 or 4 players. Two player game is balanced correctly.
3. Robot artwork is still in the works. Concept idea of variety of robot styles that can intermingle through a central point.

4. Up-Grades in the game were to have a more dynamic interaction that would cause players to want to upgrade lower value enhancements. This makes the game a little more challenging and may be too much for younger players. This current version does not incorporate a number value for up-grades.