

# IMAGINE INSPIRE INNOVATE

## THE YOUNG INVENTOR CHALLENGE

NOVEMBER 19, 2011 - CHICAGO - NAVY PIER

- Open to all kids ages 6 through 18
- All entries require Prototype and Poster Display
- Winner Determined by Popular Vote at the Chicago Toy & Game Fair on November 19, 2011

» Registration/Consent Form due by October 31, 2011

» Contact:

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REGISTER ONLINE at [www.chitag.com](http://www.chitag.com), OR

SEND TO: Chicago Toy and Game Fair  
Attn: Young Inventor Challenge  
6842 N. Kilpatrick Ave  
Lincolnwood, IL 60712

» Bring your finished prototype and poster to the Chicago Toy & Game Fair Saturday, Nov. 19, 2011 at 9:30 a.m. Navy Pier - Festival Hall A (check in at registration desk)

*We wish to thank our generous sponsors!*



# The Young Inventor Challenge

“Playing and designing games teaches children problem solving, brainstorming, cooperation and creativity.”

– Beth Sagett-Flores, Principal, Lincolnwood School, Evanston, IL

Welcome to the Chicago Toy & Game Fair Young Inventor Challenge! We believe imagination and play are crucial to healthy development and community well-being. Inventive thinking has been identified as an essential 21st Century skill by the U.S. Patent Office and educational institutions. Now we bring together imagination, play and inventive thinking in our fifth annual Young Inventor Challenge!

Use the enclosed Inventor’s Guide and Official Entry Rules to create your greatest invention!

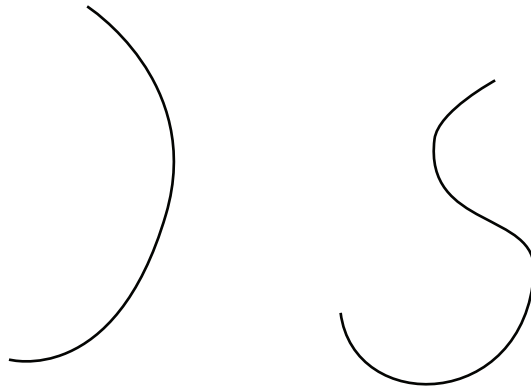
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## Imagine

What do you imagine? Have you ever spent time dreaming about a really cool idea you had? If you could pick only one game or toy to play with, which would it be? What is it about that game or toy that appeals to you so much? Do you make up new rules to the games you already own? Do you make up games to play with cool bits and pieces of stuff you have laying around? Do you play with your toys in new and entirely different ways? Could you make a better game or toy? A large part of invention is seeing old things in new ways. What do you imagine?

### ACTIVITY

Ask a friend or family member to make a doodle on a piece of paper. Something like this:



Now tell me what it is:

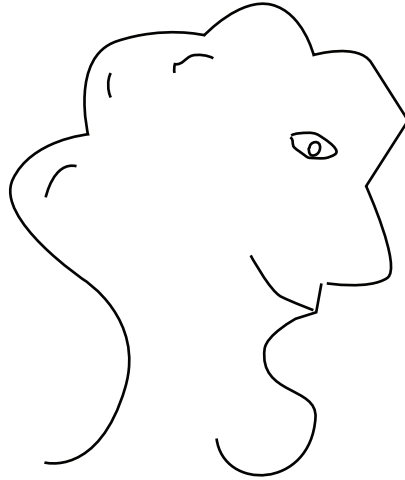
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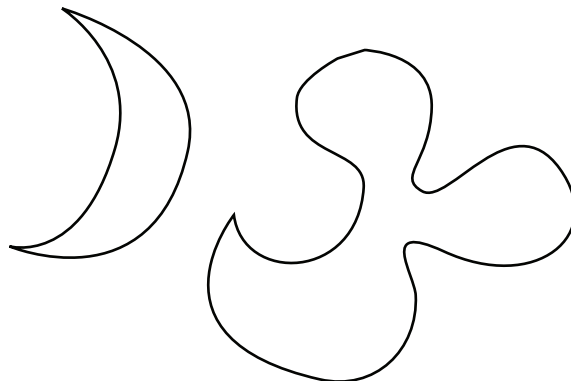
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What did you see? I used my imagination and saw this:



I thought it looked like a chin and the back of the neck so I imagined the rest of the head - a space alien's head!

Another person used their imagination and saw this:



He said they were parts of boomerangs he invented! Now that's imagination!

Now it's your turn! Use this page to practice your imagination. You may copy this page as often as you like. (Hint: You may want to use your best one for your Poster Display)

Ask someone to make a doodle for you. It can have one, two or three squiggly lines.



Now show us what you see in those squiggly lines:



What is it?

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Now, that's some imagination!

## Brainstorm

Now, it's time to Brainstorm! Brainstorming is the process inventors often go through when they are trying to come up with an idea. Brainstorming is an idea-generating technique. Ask your family and friends to help you for this step. The more people that participate in brainstorming, the more ideas get generated. You want to try to get as many ideas as possible before settling on one best idea. Brainstorming requires imagination. Let your thoughts run wild. What is the craziest idea you can think of?

### ACTIVITY

Did you know your toys and games have certain common characteristics among them? This allows us to categorize them and group them together. For example, when it comes to games, there are word games, strategy games, card games, trivia games, educational games, storytelling games, and much, much more. In toys, there are building toys, sports toys, doll toys, musical toys, moving toys, and on and on. Looking at the common characteristics of certain groups of games and toys gets our creative juices flowing. We can start thinking about the details of our invention.

| Game or Toy       | Categories  |
|-------------------|---|
| Go Fish           | Card game, set collecting game, verbal interaction game |
| Scrabble®         | Word game, Board game, Tile Laying game                 |
| Lego's®           | Building blocks, plastic, connecting shapes             |
| Skateboard Wheels | Transportation, Sports                                  |

Now it's your turn. Quickly make a list of your favorite games and toys, then write all the categories that describe it:

| Game or Toy | Categories |
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Now it's time to look at games and toys you don't have and are new to you. Take a trip to a store that has interesting and unique toys and games. List some of these games and toys and their descriptive categories:

| Game or Toy | Categories |
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## The Idea

Have you noticed any patterns yet? Have you been inspired yet? Now's the time to settle on an idea for your invention! State in broad terms what you want to invent. For example, say "I want to invent a game about dogs," or "I want to invent a toy I can throw indoors." Just keep it broad and general.

I want to invent: \_\_\_\_\_

Now it is time to come up with specifics about your game or toy. Ask yourself these questions:

### Game Questions

What topic would I like to use? Will this game be about something in particular like dogs or maybe American History, or will it be completely abstract like Chess?

\_\_\_\_\_

What physical components do I want to use? Cards? A game board? Dice? Tiles? Something unusual like a collection of nuts and bolts? \_\_\_\_\_

What game mechanic do I want to use? A game mechanic is the way the game moves, such as "roll the dice and move around the board that many spaces" or "draw a card and do what it says." Get as creative as you want. Don't be stuck on the game mechanics you've seen used. Maybe even invent a new one! \_\_\_\_\_

How many people can play? \_\_\_\_\_

### Toy Questions

What is a toy? Anything from a complex electronic or mechanical contraption down to a plain rock can be a toy. Anything from specially molded plastics to plain cardboard boxes can be toys. Do you want a simple or a complex toy? \_\_\_\_\_

Would you like to use prefabricated materials such as motors and plastics or natural materials such as fabric and stones? \_\_\_\_\_

What category would you like your toy to be in? \_\_\_\_\_

Is this a toy for boys, girls, or anybody? \_\_\_\_\_

What age group would enjoy playing with your toy? Don't be afraid to invent a toy for your brother/sister or even your parents! Everybody likes to play with toys! \_\_\_\_\_

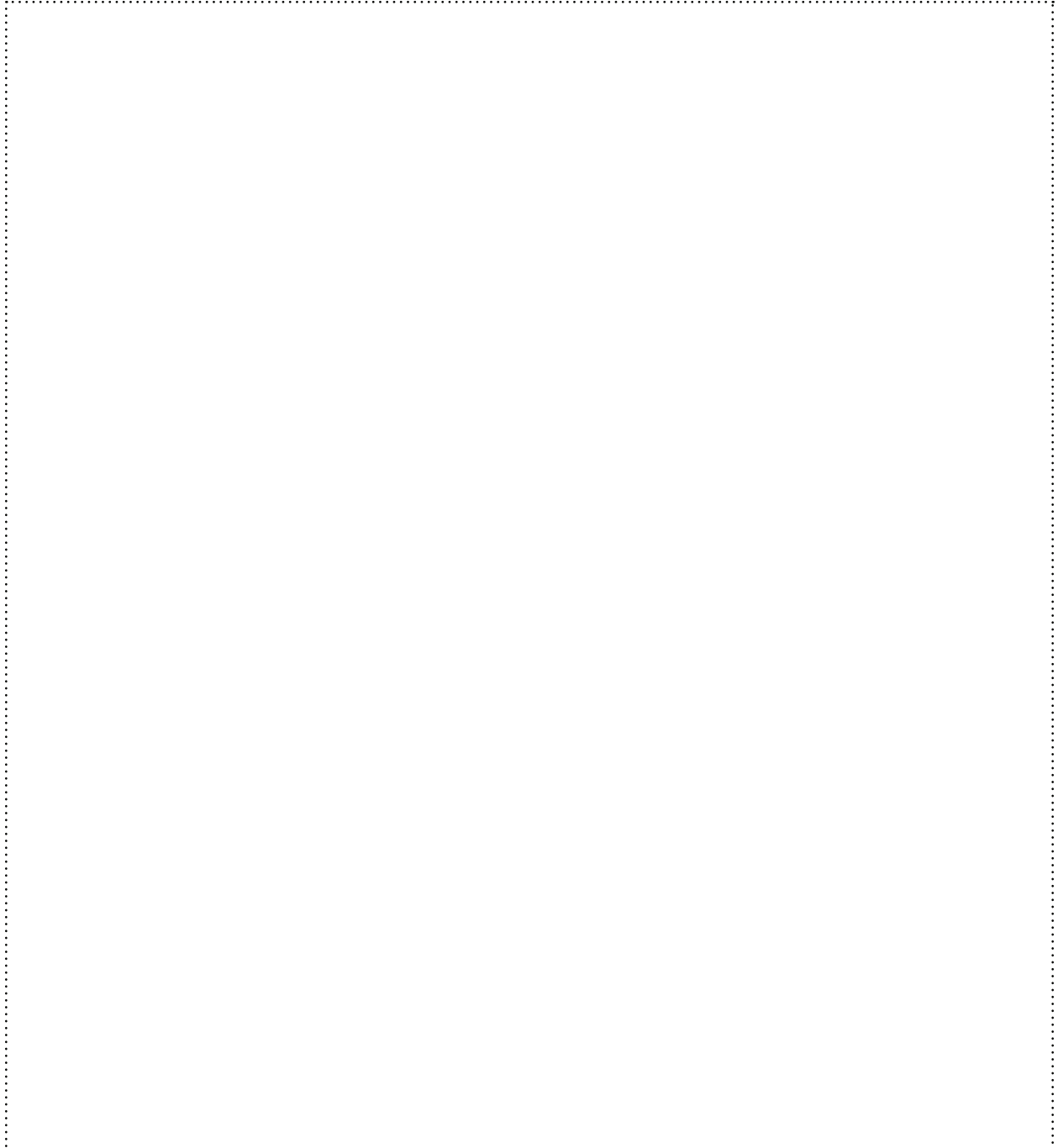
How safe is your toy? Little kids can choke on small objects and sharp pieces can cut the skin. Be sure to consider safety when inventing your toy.



## Making the Prototype

A prototype is a model of your idea. It is the very first one of its kind! Now that you have an idea, you need to make your prototype.

First, draw a sketch of your invention. If it is a game, draw the game board or the main cards or other components. If it is a toy, draw the whole toy. (Hint: You might want to include this sketch on your Poster Display.)



## MATERIALS

Now make a list of all the materials you will need. Make sure you use materials that are safe and easily available. If something is too expensive to buy, you may have to get creative in finding a substitute. Small, battery operated motors and parts are available inexpensively at hobby stores. Blank game parts can be found for purchase online. Some educational supply stores also have blank game parts. However, a great source of parts for toys and games are existing old toys and games. Neighborhood garage sales can often provide treasures for inventors who need parts! ( Hint: It would be a good idea to include this list on your Poster Display.)

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Now's the moment! Go ahead and make your invention. Voila! You are an inventor!!

## Rules and Instructions

There is one last step in creating your prototype. You must write instructions and/or rules. Yes, write! Your customers will need to know how to play with your invention and written instructions are necessary. They needn't be long, but they do need to be clear. A technique is to number your instructions. What do they do first? Then what?

Written instructions are required for your entry in the Young Inventor Challenge. You can make them part of your Poster Display or lay them on the table next to your Prototype. It's up to you how you present them. But remember - people will read them! Make them as clear as possible. Make them using a computer, or your best handwriting. Consider drawing illustrations if it's complicated. Edit your written instructions for proper grammar and punctuation.

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## Testing

You are an inventor! But you're not done yet. No, you must test your invention. Gather your family and friends to help you test your game or toy. Play with it several times. Then ask them to tell you what they think. Ask them if they would play with your invention again. Ask them if they would buy it if they saw it in a store. Ask them what they liked most about it. You even need to ask them what they didn't like about it. Don't get discouraged if you get negative comments. Just use that to make your invention even better! (Hint: Real toy & game companies often use positive comments they receive as part of their advertising. You can do this too!)

Positive Comments Received: \_\_\_\_\_

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Negative Comments Received: \_\_\_\_\_

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Did you make any changes based on the feedback you received? (Hint: Consider including this paragraph in your Poster Display.)

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## The Poster Display

Every entry must be accompanied by a poster display. The purpose of this display is two-fold:

- A) The display must demonstrate the process you went through to invent your game or toy. You may use portions of the included Inventor's Guide for your poster display, or you may summarize what you did in your own way.
- B) The display must present a marketing message designed to persuade people to buy your invention. This message should clearly and attractively show the name of the invention. You may want to include a slogan or pictures of people playing with your invention. Consider listing the benefits and unique features of your invention. Look at advertisements in magazines and newspapers for ideas on how to make an attractive advertisement.

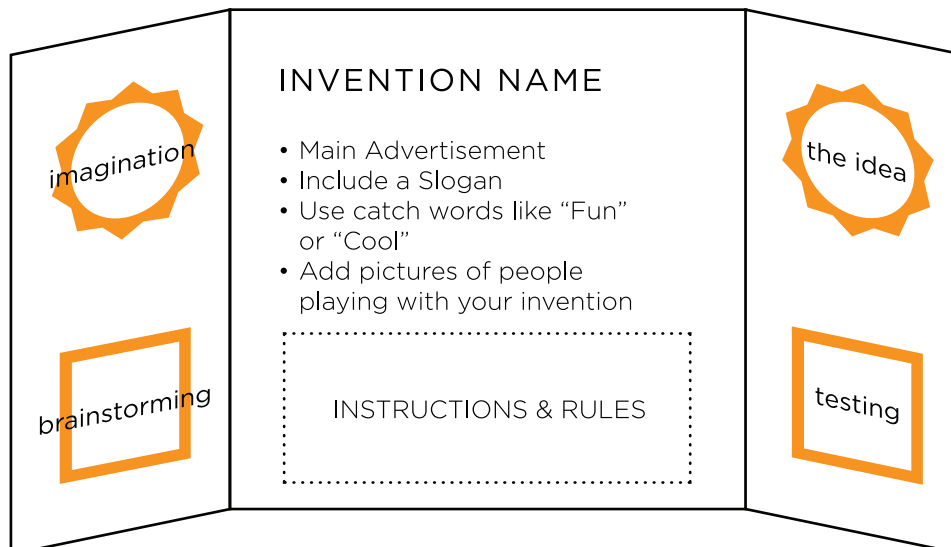
Every entry is allotted a 36" wide x 24" deep space on a tabletop. All material must fit within this space, including the prototype and poster display. There will be no walls to hang posters on. It is recommended that a freestanding tri-fold heavy-duty poster board be used in much the same way you would at a science fair.

Remember - the audience is seeing your invention for the first time. Make sure everything is explained clearly. It should be attractive and appealing.

Plan your display before gluing or taping anything. Draw a sketch on a piece of paper first.

### DESIGN TIPS:

- Use appropriate fonts. If you want it to look business-like, use Time New Roman or Arial. If you want it to look fun and creative, use a more unusual font with swirls or off-kilter letters. Just make sure it is readable.
- Use colored paper to create a background behind white materials.
- You may want to cut out colored arrows to guide the reader through the sequence to make it clear if it's complicated.
- The marketing message should be the central focus of your poster board. Make your advertisement bigger and place it in the most noticeable position on your poster board.



This design is an example only. You may use your imagination and creativity to make your own display that:

- A) demonstrates the process you went through to invent your game or toy
- B) Contains a marketing message to persuade customers to buy your invention
- C) Include Rules and Instructions on the Poster or on the table

## THE PROTOTYPE

All entrants must have a working prototype of their toy or game. Prototypes can be homemade with materials on hand. Neighborhood garage sales are a good source of inexpensive used toys and games which may be modified and adapted for your new invention. New generic game parts may also be purchased at hobby stores and educational supply stores. Some internet sites also sell blank game kits.

No hazardous materials may be used in your prototype. The Chicago Toy & Game Fair reserves the right to reject any prototype that contains hazardous material, in our judgment. Batteries may be used in a normal fashion.

Every entry is allotted a 36" wide x 24" deep space on a tabletop. All material must fit within this space, including the prototype and poster display. All material must be free standing. No wall or curtain will be provided.