



Camp Invention<sup>®</sup>

# Champions<sup>™</sup>



**Innovation Exploration Kit<sup>™</sup>, Elevate Series**

# SAFETY AND HYGIENE



**WARNING:** Choking hazard—small parts.  
Not for children under 3 years.

- All activities require adult supervision.
- Ages 5+.
- Read and follow all instructions.
- For safety and hygiene purposes, please be sure all children wash their hands after each activity.
- Demonstrate how to properly hold and use scissors. Do not run with scissors.
- Do not allow children to put materials in or near anyone's eyes, mouths, and ears.
- Do not play with or place plastic bags near the face or mouth.
- Ventilate the room when using markers.
- Magnets can be harmful if swallowed. Take precautions to make sure they are not placed near anyone's mouth.

**For an enhanced experience,  
MUSIC, POSTERS, AND VIDEOS  
can be found online at  
[invent.org/Elevate/Champions](http://invent.org/Elevate/Champions)**



**Use this password to  
access your Champions  
experience:**

**SPORTS**

**Need help? Please reach out to our  
Customer Relations Department at 800-968-4332.**



Camp Invention®

# Champions™

**Discover the unseen Champions of the sports world—Inductees of the National Inventors Hall of Fame®!**

**Build your own functioning tabletop game with inspiration from innovators who have revolutionized sports.**

## Materials

- |                                                  |                                             |                                                    |
|--------------------------------------------------|---------------------------------------------|----------------------------------------------------|
| <input type="checkbox"/> Ball bearing            | <input type="checkbox"/> Cord locks         | <input type="checkbox"/> Masking tape              |
| <input type="checkbox"/> Balloon cups and sticks | <input type="checkbox"/> Foam ball          | <input type="checkbox"/> Netting                   |
| <input type="checkbox"/> Bendable straws         | <input type="checkbox"/> Fruit basket       | <input type="checkbox"/> Pencil                    |
| <input type="checkbox"/> Bungee cord             | <input type="checkbox"/> Innovation Dream   | <input type="checkbox"/> Plastic game piece stands |
| <input type="checkbox"/> Button magnets          | <input type="checkbox"/> Team Trading Cards | <input type="checkbox"/> Player Silhouette sheets  |
| <input type="checkbox"/> Champions box           | <input type="checkbox"/> Inventor Log       | <input type="checkbox"/> Playing Surface sheets    |
| <input type="checkbox"/> Coffee stirrers         | <input type="checkbox"/> Jumbo craft sticks | <input type="checkbox"/> Scissors                  |
| <input type="checkbox"/> (wooden paddle-shaped)  | <input type="checkbox"/> Markers            | <input type="checkbox"/> Triangular paper clips    |

# Meet the Hall of Famers

*Inventors have shaped the world of sports!*

1.

Find your **Innovation Dream Team Trading Cards**. Read about the Inventors and sports connection on each one.



*If possible, check out the **Champions Behind the Sports Complex** videos to discover more about these **Innovation All-Stars**.*



## Draft Your Innovation Dream Team

*A draft is when players are chosen to be on a team.*

**INNOVATION**  
**DREAM TEAM**  
*Champions*

2.

Open your **Inventor Log** to the **Innovation Dream Team Roster** page.

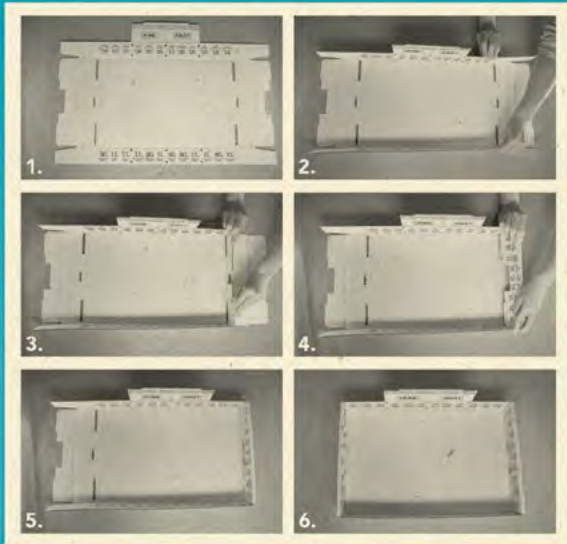
3.

Select your draft picks by circling your favorite **Inventor** from each row!

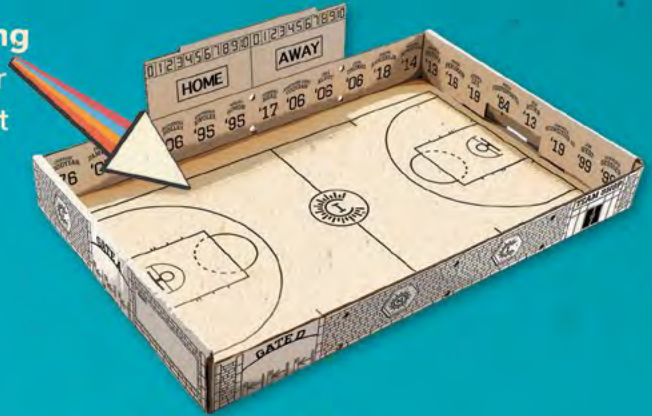
★ INNOVATION DREAM TEAM Champions						CAMP INVENTION CHAMPIONS™	
CIRCLE YOUR DRAFT PICK EACH DAY TO FILL OUT YOUR ROSTER!							
1	BLICK & BUCKER	WILLY	WILLY	SENER	GOODYEAR	ZEMBAKI	
2	JAWLEK	BOWERMAN	BERKOFF	KASSEL, SLAYTER, & THOMAS	SAVINGS JR.	KEAR	
3	LATIMER	WOLANTKA	HANDBAK	GLICK & WOODWARD	WILSON, SCOTTEN	SCHWETTER III	
4	BUTTY & BUTTY	LEE	COCORAN	HENRY	JONES	PAINTER	
5	GOOD	SESSLER & WELT	KECK, WILCOX, & SCHWITZ	DAWSON	PIERMAN	FRANKWORTH	

# Construct A Sports Complex Tabletop Game

- 1.** Fold the box to set up the base for your game.



- 2.** Choose a **Playing Surface** for your sport and tape it down, or draw your own inside the box.



- 3.** Place a magnet inside the box. Hold another magnet underneath the box until it attracts the other magnet.

- 4.** Flip the bottom magnet over, and then try to get the other magnet to move.



**What do you notice?**

**You are repelling the other magnet!**

- 5.** Choose a sports player from the **Player Silhouette** sheets.



- 6.** Insert the player into a plastic game piece stand. Tape the magnet under the plastic stand.



# Get The Ball Rolling

1.

Push a ball and a ball bearing across the surface inside the box. Observe how they move.

2.

Next, roll the ball and ball bearing so that they bounce off at least one side of the box.



**Sports and games use a lot of math and science. In soccer, for example, the way you tilt or angle your foot when kicking a ball can change the path of the ball. Practicing a certain skill in a sport, such as kicking a soccer ball over and over again, helps you figure out the science behind scoring a goal.**

**How do you think math or science is used in your favorite sport or activity?**

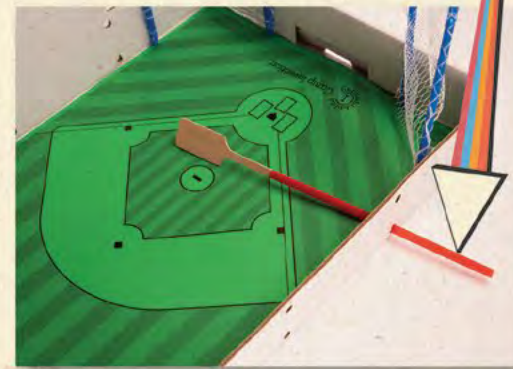
3.

Challenge yourself to get the ball or ball bearing moving without using your hands! Experiment with balloon cups and sticks, bungee cord, craft sticks, and other materials. Check out these pictures for ideas.

**Press down on the end of the stick to launch the ball!**



**Flip the paddle to hit a home run!**



4.

Look at the **Simple Machines** page in your **Inventor Log**.



**How can you use simple machines in your Sports Complex?**

**How could you make your ball roll faster? Slower?**

**What moving parts will you add to your game?**

**Does your Playing Surface have lines on it to measure distance? How else might you measure distance for running, jumping, or throwing a ball?**

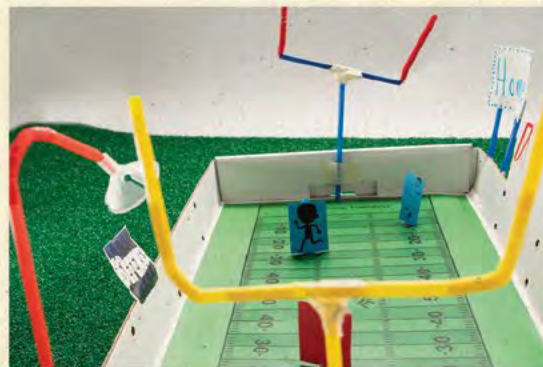
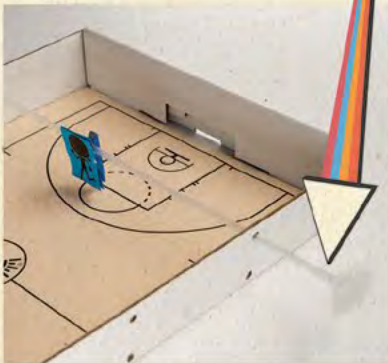
**How else can you move your players?**

**How can you combine two games into one?**

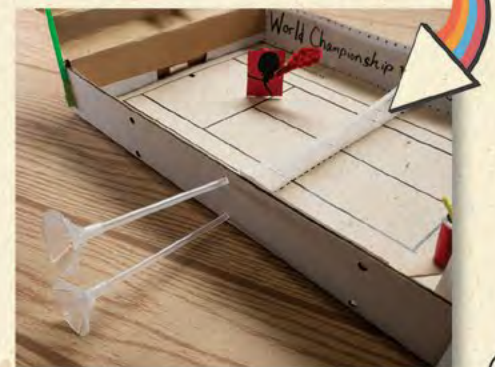
5.

Add more equipment and players to your game using the materials in your kit, along with items from your home.

**Twist the balloon stick to move your player!**



**Use netting, balloon cups, and balloon sticks to create a net!**



# Brand Your Sports Complex

*Sports are often played on a field, in a stadium, or in a sports complex. Sometimes, sports complexes are named after a person or a company!*

1. Create a name for your Sports Complex and write it on the **Brand Your Complex** page in your **Inventor Log**.

2. Imagine if you had a mascot that would show up on game day to get the fans cheering.



*What would your mascot look like?*

*What would your mascot's name be?*

3. Draw your mascot on the **Notes** page in the back of your **Inventor Log**.



4. Brainstorm a name for your mascot and write it on the **Brand Your Complex** page in your **Inventor Log**.

CAMP INVENTION CHAMPIONS™

Major Hannah

SPORTS COMPLEX NAME \_\_\_\_\_

MASCOT NAME \_\_\_\_\_

★★★★★★★★★★★★

DON'T FORGET TO ADD YOUR TRADEMARK  
TM OR ®

BRAND YOUR COMPLEX



5.

Protect the names of your mascot and Sports Complex by adding a trademark (™ or ®).

## WHAT ARE TRADEMARKS?

*Trademarks are used to identify the source, such as the company or creator, of an item. Trademark symbols, ™ and ®, mean that a product name, symbol, design, or slogan is protected, and no one else can use it without permission.*

*When you see a ® on a product, it means the creator filed a trademark application, paid a fee to the government, and was successful in federally registering their unique mark for use in commerce. Any item with a ™ has not yet been registered by the United States Patent and Trademark Office.*

6.

Write the name of your Sports Complex on your box or create a sign with craft sticks or other items from around your home.

7.

For another challenge, add onto your Sports Complex! Add a parking garage, a billboard, or even a concession stand using recyclable items from around your home.



# Game Day!

1.

It's opening day at your Sports Complex! Place two triangular paper clips on the top of the scoreboard to help keep score.



**Have you ever played a game or a sport in which the team or person with the lowest score wins? Golf is one of these sports! In golf, the goal is to get the lowest score. In your game, will the player with the highest score or the lowest score win?**

2.

If possible, play the **Opening Day** music or your favorite song.



3.

Ask someone to play a game with you at your new Sports Complex!



# MORE TO EXPLORE

Would you want to wear a heavy sports helmet when playing ball, or a heavy pair of shoes when running? Luckily, equipment like goalie masks, football helmets, baseball bats, hockey sticks, and tennis shoes can be made with strong, lightweight Kevlar®\* fiber, invented by National Inventors Hall of Fame® (NIHF) Inductee Stephanie Kwolek.

Fiberglass is another flexible and lightweight material that is used to make sports equipment like basketball backboards, water skis, snowboards, and boats. Together, NIHF Inductees Dale Kleist, Games Slayter, and John H. Thomas developed this game-changing invention.



\*Kevlar is a registered trademark of E.I. du Pont de Nemours and Company.

**When it comes to invention,  
the ball is in *Your Court!***



**National Inventors  
Hall of Fame®**



**Camp Invention®**

**Camp Invention is an educational program from  
the National Inventors Hall of Fame.**

Learn more at [invent.org](http://invent.org)

978-1-61823-113-0

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