



# **The Idea Factory**

## **Team Brainstorming Activity**



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## Introduction



The team brainstorming activity is designed to be used by a FIRST LEGO League Team to produce original ideas to solve the missions of The Challenge. The goal is to originate lots of ideas of a wide variety from every member of the team. The team will need to do this without censoring each other's ideas and with help from you, the coach, to keep on track. You will need to conduct this exercise for each of the missions the team has chosen to undertake.

## Coach Preparation

- Prepare a large piece of paper or space on a white board or black board.
- Prepare the space so the team is arranged with everyone facing the paper or board being used. Any seats should be such that there is equal seating (no hierarchy) among team members, and nothing to hide behind (no desk to lay the head down on).
- The Unsticker “Bag-o-Tricks” is an optional activity to promote creativity. This activity works well with younger teams. You can read about it in detail on page 4. If you choose to use this activity, prepare a large opaque bag filled with random objects. Most important is that the items are *varied* and *weird*. For instance, don't fill the bag with all office supplies. About 15 items is enough. A few ideas: ruler, flute, deck of cards, plastic animal, magnet.
- Read and understand what your job will be in this activity. You may want a co-coach or volunteer to assist you.

### Final Objectives:

- Guide the team to move beyond the first or “obvious” solution
- Prevent censorship, therefore allowing free creativity to reign
- Include ideas from everyone so each team member feels they have a part in the team solution
- Produce a better result in the long run by combining many different ideas

## Leading the Activity



Start by explaining that everyone on the team has the job of *Brainstormer*: to come up with as many crazy, different, creative ideas as possible.



Explain to the team that no censorship of ideas is allowed; no “That’s a dumb idea,” comments. Post the rules on the wall, and ask the team to think of other rules to add. When the team decides on one or more rules to add that you approve of, write them on the rules sheet.



Describe the goal of **One** Challenge mission. Ask everyone to start blurting out ideas to solve that mission as soon as they think of them.



Write down every idea that comes up. If the ideas come faster than you can write them down, ask for a pause or get someone to help you write. Make sure you write down enough information that the ideas can be understood later. You may need to ask clarifying questions about the idea.



Make sure everyone is involved:

- If some in your team are quiet, ask them to speak up with their ideas too.
- If only one or two people are talking, ask the team to go around in a circle from one to the next, each person adding an idea.



If all you get is silence, choose one of the activities on the next pages to “Unstick” everyone’s brains.



When you have a good list of ideas, perhaps fifteen, take a break to review them. Now the team can combine ideas and choose one or more ideas they would like to try.



Move on to the next mission and repeat this activity!

## Unstick Tricks

If the team is stuck for ideas, choose one of the three activities on the next pages to get everyone's brain moving again:

### A) *The Word Wizard*

"I am going to say a word, and when I do, everyone blurt out *what that word made you think of that might be an idea for the mission*. Even if what pops into your head doesn't seem to be an idea for the Challenge that is OK, maybe it will give someone else an idea."

Choose one of the words from below and say it out loud. If the team keeps coming up with ideas, let them! When the team slows, try another word.

Adapt	Accelerate	Add	Boost	Correct	Dump
Flush	Force	Frame	Grow	Magnify	Maximize
Minimize	Move	Narrow	Neglect	Network	Organize
Rearrange	Recycle	Reduce	Relax	Remove	Reverse
Rotate	Shake	Shift	Shrink	Simplify	Steer
Switch	Thicken	Transfer	Trim	Wall	Window

### B) *The Bag-O-Tricks*

*(This unsticker takes special preparation, see the Coach Preparation section.)*

"I am going to hold up an object from this bag, and when I do, everyone try to think of *a connection between the mission and what I'm holding*. Even if what pops into your head doesn't seem to be an idea for the mission that is OK, maybe it will give someone else an idea."

Choose one of the objects out of the Bag-o-Tricks and hold it up for everyone to see. If the team keeps coming up with ideas, let them! Once ideas become slower again, try another object.

**C) *Not Me***

“I am going to read a name. When I do, stop for a moment and pretend you are the person or animal I have just said. Then think what that person or animal would do to solve the mission, and say it out loud.”

Read one of the names from the list below to the team or make up your own. When the team is ready, move on to another name on the list.

Your favorite author

Your mother

A teacher you like

A mouse

Your grandfather

The mayor

Marie Curie

A five year old

An elephant

Albert Einstein

# The Idea Factory *Rules*

- Every idea is a good idea
- Don't decide how good an idea is, just think of new ones
- It is OK to add to or combine ideas as a new idea
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