## Divergent Tools Quick Reference

### Why? What's Stopping You?
- **Why:** helps identify the root of the problem, or figure out the entire problem space  
  - **How:** begin with a goal, wish or challenge, and ask: “why do you want this?” To the response, ask again. When you feel you have arrived at the root of the problem, ask, “What's stopping you?” Repeat the process to its logical end.  
  - **Tips:** try not to go so far as to reach “to live a happy and fulfilling life”

### Word Dance
- **Why:** when stuck, helps to think of the problem statement in new ways  
  - **How:** in the problem statement, circle the verb, then generate other verbs that might replace it. Then, circle the object or outcome words, and generate possible substitutes. Mix and match the responses. Choose the statement that best expresses the problem.  
  - **Tips:** unusual and off-course are OK when generating substitutes

### Idea Box (mix-and-match)
- **Why:** generate new and original combinations  
  - **How:** from the challenge statement, select the essential characteristics of the problem, and list those on paper as column headings. For each column, list a variety of options. Then, mix and match, choosing one from each column. What ideas does that combination give you? Repeat with different combinations.

### Brainwriting
- **Why:** quiet brainstorming; use with quiet groups, and where some people dominate  
  - **How:** one form per person, extras in a pile. Write three ideas in the first row, put form on the pile, take another. Read the ideas, write three more in the next row, building on the existing ideas or adding new ones. Continue until all the boxes are full.  
  - **Tips:** use brainstorming form with 3x3 boxes, and pre-populate with 2x2 Post-its

### Brainstorming / Stick 'em Up Brainstorming
- **Why:** classic tool for generating lots of ideas  
  - **How:** ideas are said out loud and recorded; Stick 'em Up: write it, say it, hand it up  
  - **Tips:** use 3x5 Post-its; one idea per Post-It; stick on flip chart sheets; number the sheets; enhance thinking with SCAMPER, forced or visual connections, excursions

### SCAMPER
- **Why:** spur thinking in specific ways, to enhance brainstorming or brainwriting  
  - **How:** facilitator asks questions from SCAMPER (Substitute, Combine, Adapt, Modify, Put to other uses, Eliminate, Rearrange) sheet. E.g., What can you substitute for it? What can be combined with it? What can you subtract? What can you add?

### Forced Connections
- **Why:** enhances brainstorming and brainwriting, especially when stuck  
  - **How:** facilitator holds up or points to an object unrelated to the problem, and asks: "When you look at this (object), what ideas do you get for solving this problem?"

### Visual Connections
- **Why:** enhances brainstorming, helps participants relax and incubate  
  - **How:** show an image, ask participants to write 3-5 words suggested by it. Repeat with two more images. Then, ask participants to make a direct connection from the words they have written to the problem at hand.  
  - **Tips:** use visual connections worksheet

### Excursions
- **Why:** takes people outside the context of the problem to look elsewhere for inspiration  
  - **How:** many variations. For example: participants close their eyes while the facilitator talks them through a journey to a specific place, or one of their own imagining. When they open their eyes, they record ideas that were inspired by the excursion.

## Divergent Thinking Guidelines
- **Defer judgment**  
- **Strive for quantity**  
- **Seek wild and unusual**  
- **Build on other ideas**

## Statement Starters
- **Imagine the Future**  
  - It would be great if... (IWBG)  
  - I wish... (IW)
- **Find the Questions**  
  - How to... (H2)  
  - How might... (HM)  
  - In what ways might... (IWWM)  
  - What might be all the... (WMBAT)

## Plan for Action
- **What I see myself (us) doing is...**

## Tools by CPS Stage
### Imagine the Future
- **Brainstorming**  
- **Brainwriting**  
- **Why? What's Stopping You?**  
- **Excursions**

### Find the Questions
- **Brainstorming**  
- **Brainwriting**  
- **Why? What's Stopping You?**  
- **Word Dance**

### Generate Ideas (low to high novelty)
- **Idea Box**  
- **Brainwriting**  
- **Brainstorming**  
- **SCAMPER**  
- **Forced Connections**  
- **Visual Connections**  
- **Excursions**

### Craft Solutions
- Use convergent tools to select from ideas  
- Use “Generate Ideas” tools to craft and strengthen solutions

### Explore Acceptance
- **Brainstorming (identify assisters, resisters)**  
- “Generate Ideas” tools to find ways to use assisters and overcome resisters

## Plan for Action
- **Brainstorming (to identify action steps)**