The Builder

Visual-Spatial Reasoning

Meet The Builder:

The builder helps you make pictures in your mind. They can imagine how shapes, spaces and pieces fit together, or how they would look if you moved them. The builder helps you with puzzles, building things, drawing, and finding your way to places. They also help you make sense of numbers and sizes. For example, working out how big something is, or how much of it there is.

When your Builder finds building hard

If your builder needs some help, you might:

- Find it hard to draw or copy pictures
- Get lost in new places, or have trouble following directions
- Find puzzles, Lego or building games hard
- Feel confused by maps, diagrams or charts
- Have trouble working out how much of something there is, how far away it is, how big it is, or how many of something there are.
- Get muddled when trying to imagine what something will look like if you turn it or change it
 like picturing your living room if you moved the sofa
- Find maths problems tricky. It's not just knowing the steps, but also knowing what numbers really mean. Like, how "big" is 5 compared to 10, or what adding and multiplying numbers are doing to numbers

What you can do to help your Builder

- When you are shown how to do something, ask them to explain it step-by-step as they go
- If you're stuck on a puzzle or picture (like where a Lego piece goes) talk out loud to yourself to help you figure it out.
- Use real things to help you understand. Use your fingers, cubes, beads, or number lines, not just words and pictures.
- Break big jobs into small steps when you're building or drawing
- Go slowly and carefully it's fine to take your time
- Watch videos, look at models, or have someone show you in person
- Use real measuring tools (like rulers, measuring jugs, or blocks) to check size, distance or amounts. Don't try to guess
- If a picture or diagram is too busy, cover the parts you don't need. Use models, videos or people showing you to help you learn.
- If you have trouble keeping your place when reading, use a finger, ruler, bookmark or piece of paper to help you keep track.

Make sure the person is ready to learn these strategies. Remember, not every strategy works for everyone. When unsure, focus on what **you** can do to support the person

What other people can do to help your Builder

Explaining

- Tell as well as show make sure you are explaining what you are doing as you do it
- Point out important details don't assume the person can find them
- When giving visual information (a graph, chart, map, visual schedule, visual checklist, etc) include a key. A key is a short, written description of what the visual information shows
- Make sure visual information is kept as simple and to the point as possible. Don't add lots of detail they don't need
- You can still use visual supports, such as visual schedules. However, make sure you talk them through with the person. Point to show the order things will be happening. Remember, they might not understand the layout unless you show them.
- If you're teaching something physical, don't just show them how to do it. This includes things like how to load a dishwasher, pack a suitcase, or tie their laces. Describe what you are doing. Give them with written and/or verbal rules for how to go about it. Get them to do it with you helping where needed (e.g "the big plates go at the back").
- Remember: they will learn best by listening and talking, not just by watching. When someone tells us something, we understand it like a story. So, it helps when the person explains things step by step, and gives us enough background to make it make sense.
- Teach what numbers mean, not just how to get the answer (e.g "5 is half way between 0 and 10")
- Use visual models like number lines, blocks, etc to build number sense
- Use the same visual structures (e.g lay out problems the same way) so they learn the pattern
- Use real world examples to show what adding, taking away, timing and dividing mean (e.g sharing apples for division)

Be practical

- Make sure people know how they ask for help. Remember this might not be with words
- Let them use their hands. Physically building or trying it makes more sense than seeing it
- Give time to explore and practice
- Use gesture or pointing when giving spatial instructions (e.g "put it here on the left")
- Suggest they use self-talk to help them think through problems
- Finding their way around may be more challenging for them. More so for big, complex or new places. Give them more time to learn their way around. Take them along key routes they need to know. Describe visual markers they will see along the way as you go.

Use tools

- Give visual supports for size and space e.g templates, outlines, or fill-in guides
- Break maths problems down using physical objects before moving to picture or numbers
- Make sure they know how to use google maps so they can get instructions on moving from place to place