



Wee Learn

Wee Experts (5 – 6 years): The Importance of Spatial Skills



What do reading a map, building a block tower and loading the dishwasher have in common? They are all activities that strengthen spatial reasoning, a skill set that is vital to children's success in math and science. According to Temple University's Dr. Nora Newcombe, spatial thinking is what allows us to mentally "picture the locations of objects, their shapes, their relations to each other and the paths they take as they move." In daily life, we use spatial reasoning to read maps, find our way home from the store, interpret diagrams and charts and understand how objects relate to each other — a skill needed for everything from hitting a tennis ball to building a LEGO structure.

Here are three simple ways you can help your kids become visual thinkers.

Draw a Map: After looking at maps together and talking about how they work. Use simple shapes to draw and label objects such as furniture or playground equipment. Take a walk around the block together, looking for landmarks to include in a neighbourhood map. As kids get more proficient, encourage them to create maps of imaginary worlds or of places in their favourite books or movies.

Treasure Map: After drawing a map of a room together, hide a special object somewhere in the room and then point to its location on the map. If they struggle, use spatial language to give clues, such as "It's under a pillow" or "It's inside a cabinet."

Talk about Directions: According to a 2015 study, children who regularly play with building blocks and jigsaw puzzles have more advanced spatial skills than those who do not play with spatial toys. — encouraging your kids to solve and build. This is particularly important for our daughters: the study also found that "females play less with spatial toys than do males, which arguably accounts for males' spatial advantages."

Sometimes we forget that children are still developing a vocabulary for concepts we take for granted, such as:

- Shapes (circle, triangle, square)
- Features of Shapes (bent, edge, corner, twisted)
- Size (tall, wide, long, short)
- Location (next to, underneath, above, below, behind, over)

When we help kids develop their spatial skills, we give them a mental framework for understanding how the world — this beautiful, mathematical, scientific world — works. And that, in turn, will help them figure out their place within it.

<http://to.pbs.org/2nI6ZS5>

