THE SENSORY INTEGRATION AND PRAXIS TESTS (SIPT)

Following is a brief description of each of the subtests that comprise the SIPT.

1. **SPACE VISUALIZATION**: Evaluates visual space perception and mental manipulation of objects in space. These skills are necessary for things like recognizing letters and which pieces of a puzzle will fit together.
   a. **SPACE VISUALIZATION CONTRALATERAL USE SCORE (SVCU)**
      This section evaluates the child’s tendency to use each hand in contralateral or ipsilateral space.
   b. **PREFERRED HAND USE (PHU)**
      This part of the score of the Space Visualization test measures the proportion of attempted items on which the child uses his dominant hand to place blocks.

2. **FIGURE GROUND**: This test requires the child to select a foreground figure from a competing background. This skill is used in tasks such as finding a piece of clothing from a pile of laundry, a child’s own jacket or shoes from amongst his/her classmates’, or locating objects in a room such as a toy or pencil. This skill is also useful to children for tasks such as reading what is written on the blackboard at school.

3. **STANDING AND WALKING BALANCE**: This test evaluates the child’s ability to balance on one or both feet, both statically and dynamically, with eyes open and closed. These skills contribute to a child’s ability to play games and sports as well as develop endurance for everyday things like sitting upright all day at school.

4. **DESIGN COPYING**: This section evaluates visuo-practic and visuo-construction skills. It assesses both accuracy and approach in copying designs. These skills are necessary for understanding how letters fit together for handwriting and also for organizing written work on paper.

5. **POSTURAL PRAXIS**: This part of the test evaluates the child’s ability to imitate positions or postures demonstrated by the examiner. These skills are used in such things as learning a dance or playing sports.

6. **BILATERAL MOTOR COORDINATION**: This test measures the ability of the child to move both arms and both feet together in a smoothly integrated pattern. These skills are necessary for tasks that require using both sides of the body at the same time in tasks such as tying shoelaces, riding a bike, or using the monkey bars in hand over hand fashion.

7. **PRAXIS ON VERBAL COMMAND**: This test measures the child’s ability to motor plan body postures from verbal directions without visual cues. These skills are used in things like playing “Simon Says” or following directions given by the teacher.
8. **CONSTRUCTIONAL PRAXIS:** This test measures the child’s ability to relate objects to each other in three-dimensional space. It involves visual spatial understanding and motor planning a course of action to replicate simple and complex block structures. Constructional Praxis involves ideation, conceptualization, space perception, and planning. These skills are needed to build with construction toys, make a sandwich, sew from a pattern, or build models.

9. **POSTROTARY NYSTAGMUS:** This test evaluates the integrity of a relatively discrete vestibular-ocular reflex following rotation. It is the only test of the SIPT that is reflexive rather than performance based. This test gives us information about how a child can orient themselves upright against gravity, their ability to stay alert, and how they combine sensory information to understand where they are in space. These skills are necessary to do things like, visually follow the teacher and her directions as she walks in front of the room while talking, sitting upright at a desk to complete seatwork, and paying attention in school.

10. **MOTOR ACCURACY:** This test is a visuo-motor test which assesses eye-hand coordination in a wide variety of positions relative to the body, including crossing the body’s midline. These skills are needed when doing mazes and cursive writing.

11. **SEQUENCING PRAXIS:** This test is designed to measure the child’s ability to repeat a series of hand and finger movements following demonstration by the examiner. These skills are useful for tasks like taking items out of a desk at school, playing a musical instrument, learning to print, or wrapping a present.

12. **ORAL PRAXIS:** This test measures the child’s ability to plan and execute tongue, jaw and lip movements following demonstration by the examiner. These skills make it possible for the child to speak clearly, to engage in tasks like blowing bubbles, and to coordinate chewing and swallowing for successful management of food and saliva in the mouth.

13. **MANUAL FORM PERCEPTION:** Part I – involves identifying the visual counterpart of a geometric form held and manipulated in the hand. Part II – involves feeling a shape with one hand and finding the matching shape among a line of blocks manipulated with the other hand, without the aid of vision and visual cues. A child might use skills like this to find an object in their pocket without looking or to copy from the board without looking down at their page continuously.

14. **KINESTHESIA:** This test assesses the capacity to perceive joint position and movement. This information helps the child develop body sense and contributes to the child’s understanding of how the body moves in different activities. Kinesthesia helps us to not bump into people or objects around us and in other functional tasks like positioning our arm in the sleeve of a sweatshirt or jacket, or playing games like pin the tail on the donkey, or tennis (adjusting the arms to serve the ball).

15. **FINGER IDENTIFICATION:** This test measures the ability to identify which finger or fingers are touched by the examiner with vision occluded. Accurate feedback from the fingers of the hand is used in skills such as positioning a marker, scissors or paint brush in the hand. Without these skills, holding a cup without spilling is difficult.
16. **Graphesthesia**: This test evaluates the ability to translate tactile input into a motor response. It assesses the integration between tactile and visual input and fine motor planning. This information helps the child distinguish between safe and harmful stimuli, such as the difference between a crawling bug and the light touch of a friend, so that they can act accordingly.

17. **Localization of Tactile Stimuli**: This test assesses the child’s ability to localize a specific tactile stimulus, applied to the hand or arm, with vision occluded. This skill is used for tasks such as buttoning a button behind one’s back, putting in a pony tail in one’s own hair, or adjusting clothing without looking.