

# Visual Perception

Visual Perception is the way we know and understand the world around us through what we see. It is not our ability to see things, but our ability to make sense of what we see.

Before being able to fully understand what an object is, we first need to explore how it feels.

Allow your child time to explore different shapes and textures using their hands and mouth to assist them in building a mental picture of an object.

## Visual Perception includes:

- Visual Attention is being able to focus on a specific task or item.
- Figure Ground is being able to find one shape or item from a collection of shapes or items.
- Form Constancy is being able to recognise that two objects can be similar even though one may be bigger, smaller, turned around, upside down or partly hidden.
- Spatial Awareness is being able to understand where your body is in relation to other objects and people in a room. It is also being able to identify different shapes and understand distance.
- Visual Discrimination is being able to find similarities and differences between objects, looking at size, shape or colour.
- Visual Memory is being able to remember an item or details we have seen, when it is removed from view
- Visual Closure is being able to recognize and name an object when it is partly hidden.



**VISUAL ATTENTION** is a child's ability to focus on a specific task or item. Children often appear easily distracted from an activity or appear to have difficulty focusing on a specific task, this could be due to a lack of visual attention.

If a child has limited visual attention they may have difficulties at home and school with tasks such as completing games, listening to instructions and finishing a piece of work.

Ideas to help encourage visual attention:

- Gain child's focus prior to any activity using a recognised indicator e.g. clapping, buzzer, bell.
- Before giving any other instructions, say "Look at me".
- Use visual words to transfer child's attention to something specific "look at the blackboard" or "have you seen what I have?"
- If the child's attention lapses whilst listening, try to stop mid-sentence and remain silent to see if they will look at you again.
- Check child understands/comprehends the instructions or task.
- Reduce visual/auditory distractions where possible e.g. pictures from around the blackboard, switch off the TV, do not sit child by a window where people/objects will be moving past.
- Use varied activities to maintain interest.
- Take regular breaks in between activities, something active may help raise the child's energy level which could help with visual attention.

### Copying from the board

- Use of coloured chalks can improve attention to visual information.
- Use a clear writing style.
- Use an adjacent white / blackboard with a simpler format.
- Allow extra time to copy off the board.

### **Worksheets**

Ensure presentation is not visually confusing. Resist the temptatio nice', keep information simple.

Use of photocopier to enlarge.

Use a spare sheet of blank paper to cover parts of the work sheet .



**FIGURE GROUND** is the ability to distinguish the foreground from the background information.

- Find an object hidden in a picture. (Usbourne books, "Where's Wally" style worksheets, special interest magazine e.g. find the wrench in the image of the tools).
- Look for hidden objects hidden in containers, boxes or drawers.
- Completing basic puzzles.
- Word / letter searches. Making your own small grids can be helpful, e.g. a grid with 9 squares containing letters. "Point to the letter 'a'".
- Planning wardrobe / workspace label boxes with a word or picture so that it is
  clear where belongings are kept. This can include both school resources (crayons,
  paper, scissors) and items of clothing at home (picture of socks and pants /
  tshirts / shorts on the appropriate drawer front)

Children with figure ground difficulties may have problems following written/ reading work on the page. The following strategies may be appropriate:

- Place objects / work on plain white paper to provide minimal background distraction.
- Use a 'word window' or piece of card with a cut out in the centre, to highlight the area of text being read, while covering the rest of the text.
- Highlight sections of work that are appropriate for the lesson / task
- Space out instructions/ questions on a page





**FORM CONSTANCY** is the child's ability to perceive an object or shape despite differences in presentation i.e. size, style, colour or orientation..

Activities to develop this can include:

- Sorting and matching games
- Puzzles.
- Using the same font size in worksheets, consider key letters such as 'a' which can also appear as ' $\alpha$ '.

**SPATIAL AWARENESS** is the knowledge of the external space around our bodies, as well as the relationships between oneself and objects within that space.

As a child explores their environment they use their senses of touch, proprioception, body awareness and vision to understand their physical world. Children with poor spatial awareness tend to be clumsy.

Physical play in which the child has to use their muscles will increase proprioceptive feedback to the brain, therefore improving a child's awareness of where they are in space. (Soft play / gross motor play)

During play ,use prompt words to assist the child begin to understand directionality – such as "climb **over** the wedge", "go **through** the tunnel", "crawl **under** the blanket".

Role play games such as dressing up assist to build up awareness of body parts.

Modelling actions during songs such as Heads, Shoulders, Knees and Toes.

Use construction toys such as building blocks, duplo and stickle bricks.

Track and pop bubbles.





#### **PRODUCING ORGANISED WRITTEN WORK:**

Poor spatial awareness affects the child's interpretation of the spatial relationships of objects, letters and words to one another, therefore often results in messy or disorganised work. Spatial relationship is the skill required to identify the orientation of a shape. It can affect the position of letters on lines and letter reversals in writing.

These tips may aid the child produce neater more organised school work:

- Writing the 'bed' reminder at the top of the page the word 'bed' forms the shape of a bed as a reminder of which way round 'b' and 'd' go.
- Using squared paper to help with spacing e.g. 1 letter per square and 1 square as a space between words.
- Use a lolly stick, tongue depressor or strip of paper to mark a space between words.
- Mark the top / bottom and starting side (left) of the page e.g. with coloured dots.
- Pre-marked paper could be used Try pre-marking paper, indicating space appropriate for name, date and subject or paper which indicates ascender/descender lines,
   e.g. ground, grass and sky sheets.





**VISUAL DISCRIMINATION** is the ability to detect the specific qualities of an object. Visual discrimination allows a child to identify similarities and differences between objects. As a child begins to learn these skills they can sort items into categories, according to shape, colour etc.

- Matching simple geometric shapes, according to shape or colour
- Provide a sensory rich environment for the child to explore use sand, paint, squirty cream – get them to draw different shapes in different media. This will also develop their tactile discrimination.
- Spot the difference pictures.
- Use descriptive language when discussing an objects properties such as 'hard', 'soft',
   'rough' or 'smooth'.
- Strategies for where to start writing on the page, example having a "green for go" symbol at the beginning and "red for stop" at the end.

**VISUAL MEMORY** is the ability to retain and recall an item or details we have seen, when it is removed from view. **VISUAL SEQUENTIAL MEMORY** is the ability to recall a sequence of items in a specific order.

- Assist development of object permanence by playing hide and seek with toys. Cover up a small item with a stacking cup and see if they can find it.
- Matching pairs games.
- Kim's Game. Put 3 items on a tray and cover it over. Remove 1 item without the child seeing. Ask them what is missing. Increasing the number of items will increase the complexity.
- Copying patterns either using building blocks or lacing different colour beads onto a lace. Start easy eg. Red-Blue-Red-Blue... 'what comes next?'
- Spot the difference pictures.





VISUAL CLOSURE is the ability to recognise th	e whole shape when only part of it is visi-
ble. Eg: This shape is seen as a square.	<del></del> 1

- Show the child a variety of small toys and ensure they can name them all. Partially hide 2 or 3 of the toys under a cloth and then ask the child to identify them.
- Jigsaw puzzles.
- Cut a picture of a toy in half and ask the child to identify what it is.
- Cut out pictures of favourite items, TV characters, places. Cut these into 2-3 pieces and ask the child to match them up to make a whole picture.
- Use construction toys such as blocks or duplo to make 3D models from a 2D drawing.
- Basic dot to dot drawings.



