



By Vision For Learning

FREE activities for training visual attention on the iPad

Doodle Buddy



For Ages 5 to 6 years



Facts About Vision

- Over 80% of learning is derived from vision.
- At least 60% of learning involves close work.
- Vision helps us to interpret what we see.
- Vision guides our actions and motor skills.
- Vision enables rapid information processing.
- Vision creates the pictures in our mind.
- Visual development continues until mid-to-late teens!
- New research shows that visual skills predict reading ability¹.

<http://www.sciencedaily.com/releases/2012/04/120405131419.htm>

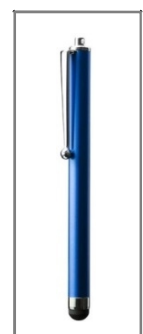
Information From the American Optometry Association

References:

1. Sandro Franceschini, Simone Gori, Milena Ruffino, Katia Pedrolli, and Andrea Facoetti. *A Causal Link between Visual Spatial Attention and Reading Acquisition*. [Current Biology, 2012](#)
2. Pienaar AE, Barhost R, Twisk JW. *Relationships between academic performance, SES school type and perceptual motor skills in first grade South African Learners: NW-CHILD study*. [Child Care Health Dev, 2014](#)

What You Need to Know

1. Download the *latest version* of **Doodle Buddy** from the App Store.
2. Training should be done 2x a day for 15 minutes or 3x a day for 10 minutes.
3. If 2x a day: train a task + Letter Trace in the morning (eg. 15 min at school) and a *different* task + Letter Trace in the afternoon (eg. 15 min at home).
4. If 3x a day: train two *different* tasks + Letter Trace (for 10 min each).
5. Stay with the SAME tasks all week (6 or 7 days) but create new challenges with goal of making each task more difficult.
6. Training should be done for at least 4 months - the longer the better.
7. Training involves working with a parent, grandparent, teacher aide or therapist.
8. *Limit* action game time for young children. This may improve visual reflex behaviours but at the expense of the visual skills required for reading.
9. Training on the iPad together is *fun* & provides quality 1-1 time.
10. **Have your child's vision checked by an *optometrist* before starting.**
11. Most of the activities require using an iPad pen (stylus).
12. Check your child's pen grip when using the stylus. If this is unusual consider using a pencil grip or seek advice from a teacher or occupational therapist.



IMPORTANT: Visual interventions such as iTrain may be limited if *other factors* are also affecting learning progress. This programme is designed to enhance visual development in young children. It is not a replacement for conventional therapies but is offered as a *complementary* therapy.

OTHER RESOURCES

1. For older children ages 7 to 17 years see the iCept Programme on the iPad – found under “icept testing” on the App Store.



2. If you have found this free resource to be helpful leave a comment and like us on Face Book under “Helping Dyslexia” – your child doesn’t have to be dyslexic!



TRAINING TASKS

1. CONNECT2
2. SIZE IT
3. DOODLE CIRCLES-1
4. DOT TO DOT
5. VISUAL TRACE
6. VISUAL SEARCH
7. COUNT IT
8. FIGURE IT
9. CIRCLE IT
10. SLIME
11. DOODLE CIRCLES-2
12. FAR OUT
13. SMILEY FACE TRACK
14. SPOT IT
15. RACE CAR TRACK
16. SPEED DOTS
17. SAY IT DO IT
18. VISUAL MATCH
19. PAIR IT
20. PATTERN ANALYSIS
21. STICK MAN
22. ANALYZER
23. VISUAL COUNT
24. VISUAL MEMORY
25. BODY MAP
26. VISUAL THINKING
27. VISUAL AUDITORY 1
28. VIZUALING PICTURES
29. VISUAL AUDITORY 2
30. VISUALIZING WORDS
31. DOODLE MAP
32. SELFIE
33. LETTER TRACE

OPTION ONE: Training Schedule

WEEK	TASK 1 + Letter Trace	TASK 2 + Letter Trace
1	CONNECT2	SIZE IT
2	DOODLE CIRCLES-1	DOT TO DOT
3	VISUAL TRACE	VISUAL SEARCH
4	COUNT IT	FIGURE IT
5	CIRCLE IT	SLIME
6	DOODLE CIRCLES 2	FAR OUT
7	SMILEY FACE TRACK	SPOT IT
8	RACE CAR TRACK	SPEED DOTS
9	SAY IT DO IT	VISUAL MATCH
10	PAIR IT	PATTERN ANALYSIS
11	STICK MAN	ANALZYER
12	VISUAL COUNT	VISUAL MEMORY
13	BODY MAP	VISUAL THINKING
14	VISUAL AUDITORY 1	VISUALIZING PICTURES
15	VISUAL AUDITORY 2	VISUALIZING WORDS
16	DOODLE MAP	SELFIE

OPTION TWO: Training Schedule

WEEK	Task 1	Task 2	Letter Trace
1	Same as above except training is done 3x a day for 10 minutes each: Task 1 (10min), Task 2 (10min) & Letter Trace (10min)		

- Repeat some or all activities again as necessary.
- CONTINUE using *Visualizing Words* for spelling practice.

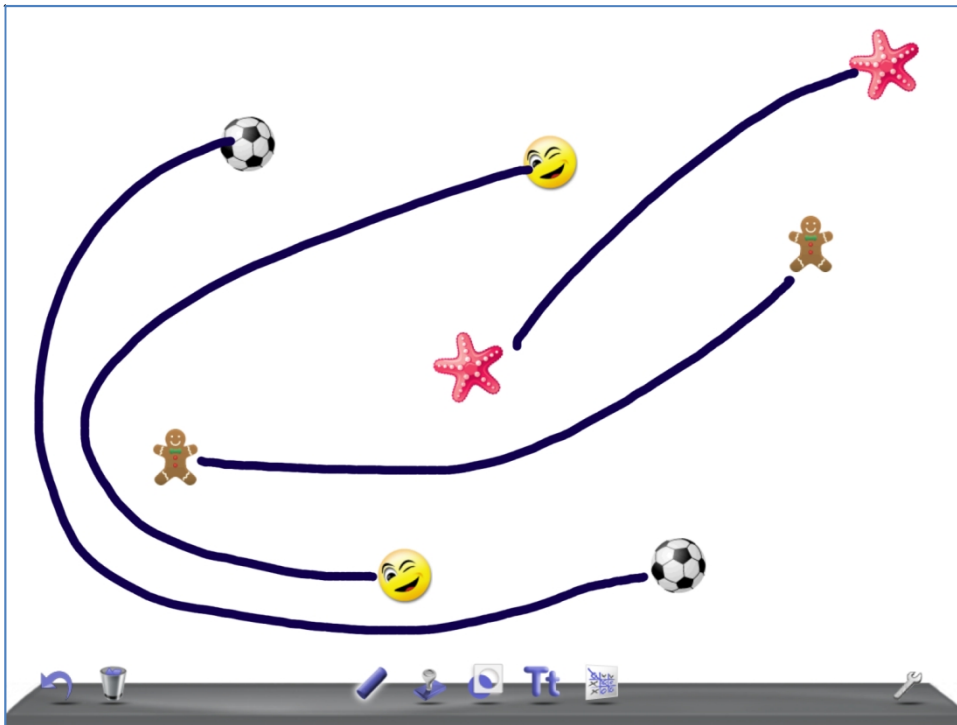
CONNECT2

TRAIN: Visual motor, visual search, spatial awareness.

DESCRIPTION:

1. Place some matching pictures on the screen.
2. Your child must connect the pictures using their finger or stylus pen *without* crossing any previous lines drawn.
3. Use different pictures and *increase* the complexity as they improve.
 - Note: Tap on the rubbish bin icon to clear the screen.

Help: If necessary allow your child to cross lines at first and then progress to not crossing lines.

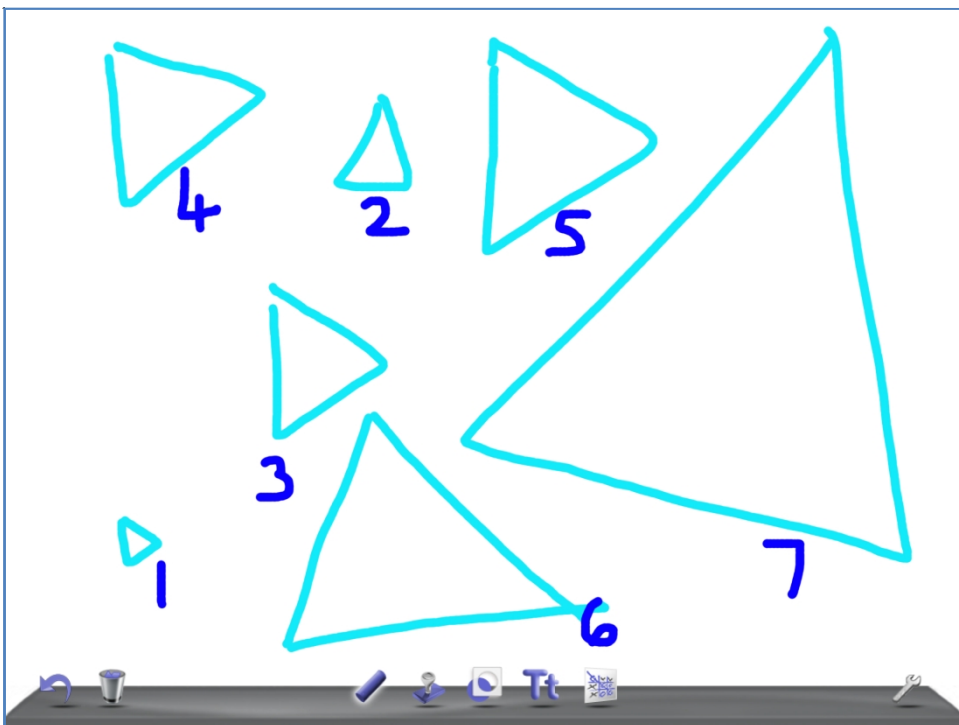
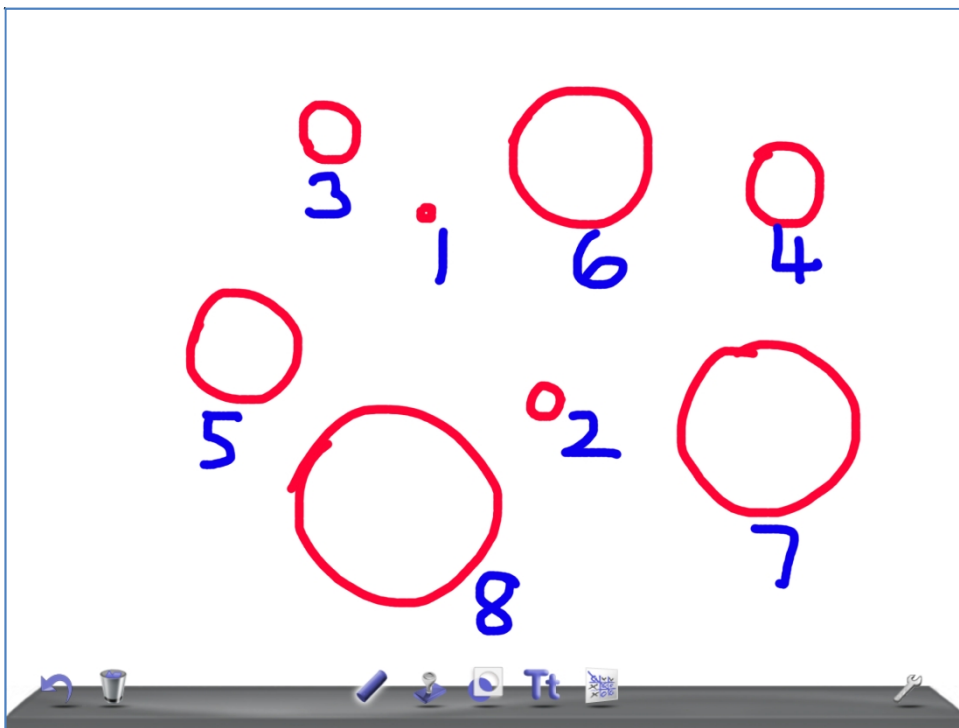


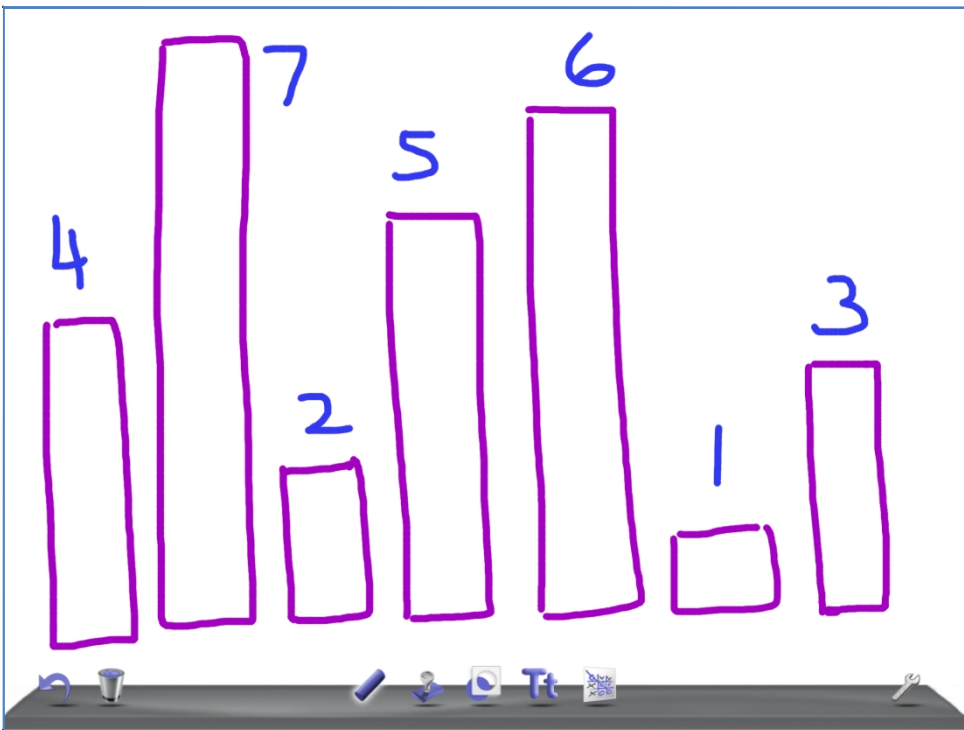
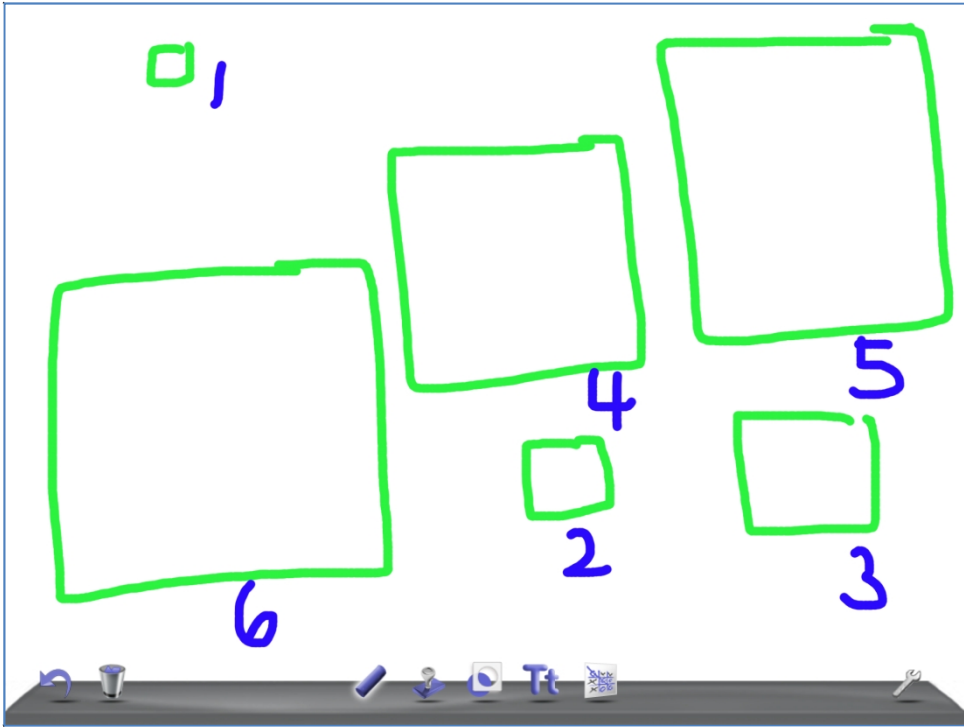
SIZE IT

TRAIN: Visual analysis (comparing size).

DESCRIPTION:

1. Make some shapes (circles, squares, triangles, rectangles, diamonds, hearts, houses, crosses, stars, letters etc) of varying sizes.
2. Ask your child to sort them by size starting with the smallest to biggest.
3. Number the order they select them and when finished ask them to check if they are happy with this order. Keep practicing...





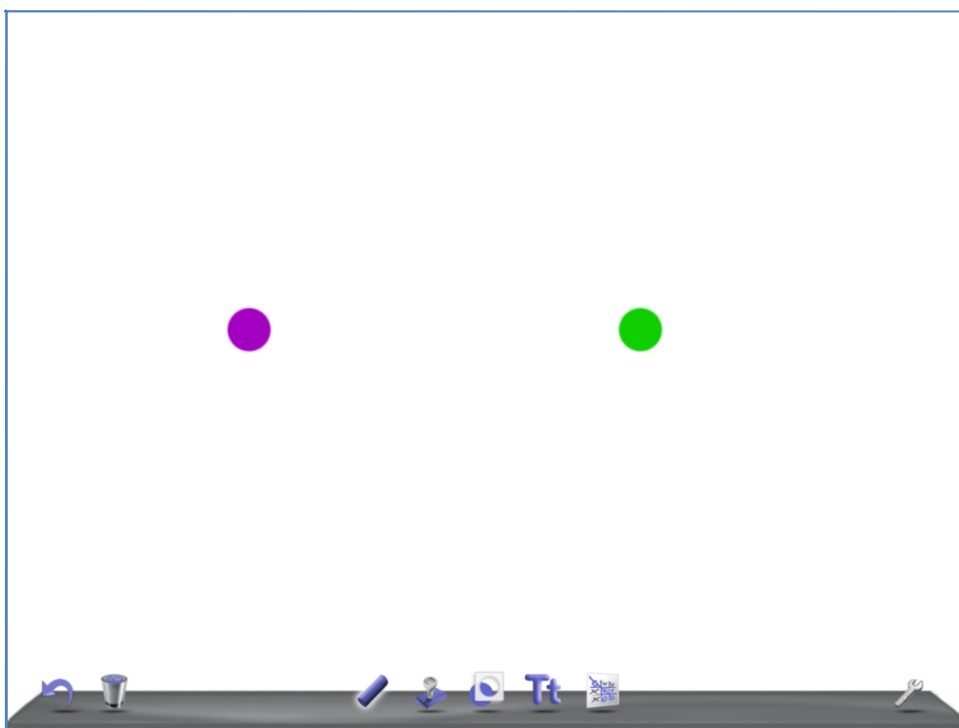
DOODLE CIRCLES-1

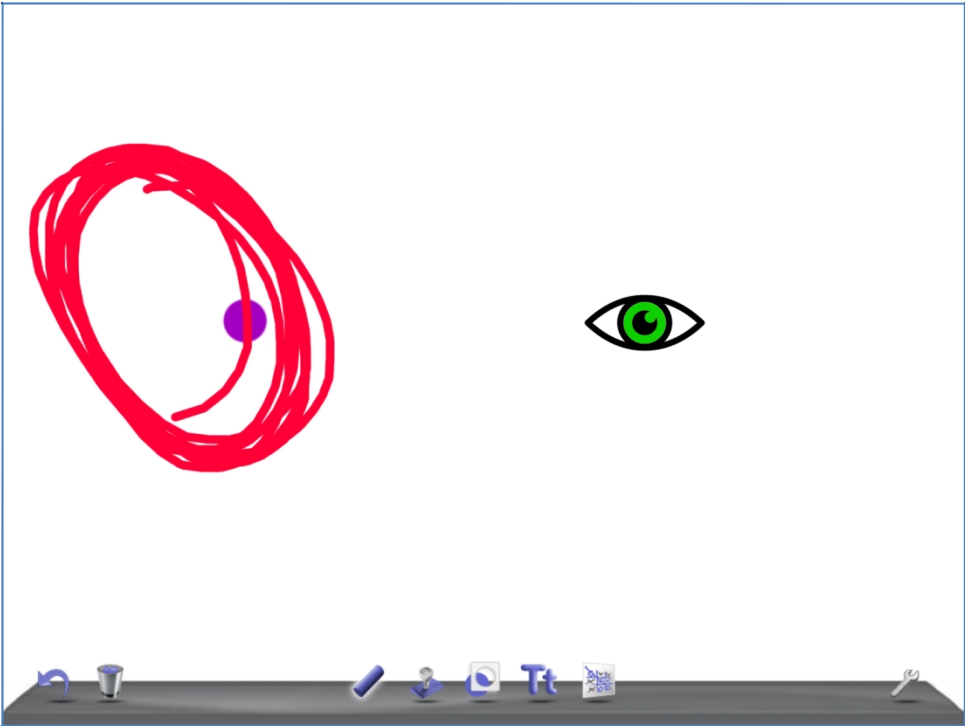
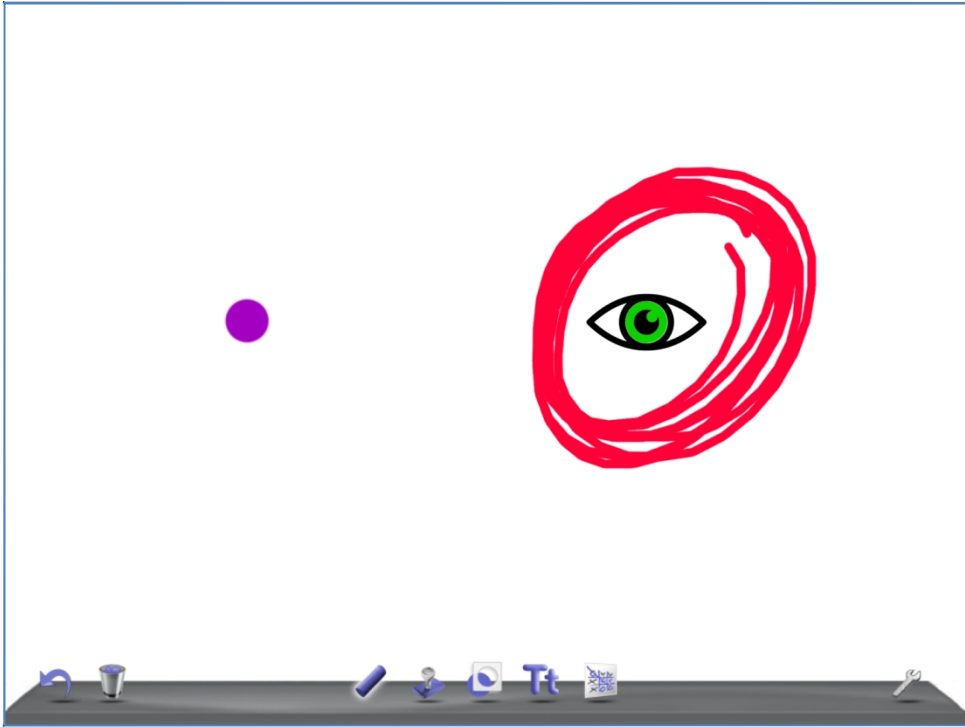
TRAIN: Visual motor, spatial awareness.

DESCRIPTION:

1. For this task your child should be *standing* and the iPad placed on a table or desk upright (but angled) in the stand.
2. Place a spot on the left and right side of the screen as shown below.
3. Ask your child to look at a spot and draw circles around it with their finger.
4. Now ask them to repeat this for the other spot (clockwise & anticlockwise).
 - o Note: use the back arrow icon to clear the circular traces.
5. Now ask them to look at the spot on one side and to use their finger to draw circles around the spot on the OPPOSITE side (clockwise & anticlockwise).
 - a. When looking at the LEFT spot use the RIGHT hand.
 - b. When looking at the RIGHT spot use the LEFT hand.
 - c. Now when looking at the LEFT SPOT use the LEFT hand!
 - d. Now when looking at the RIGHT spot use the RIGHT hand!
6. To increase the difficulty:
 - a. repeat and count out loud to 10 (eg. 10 cycles).
 - b. repeat and say the letters of the alphabet.

Help: multiple repetitions are needed to improve development.





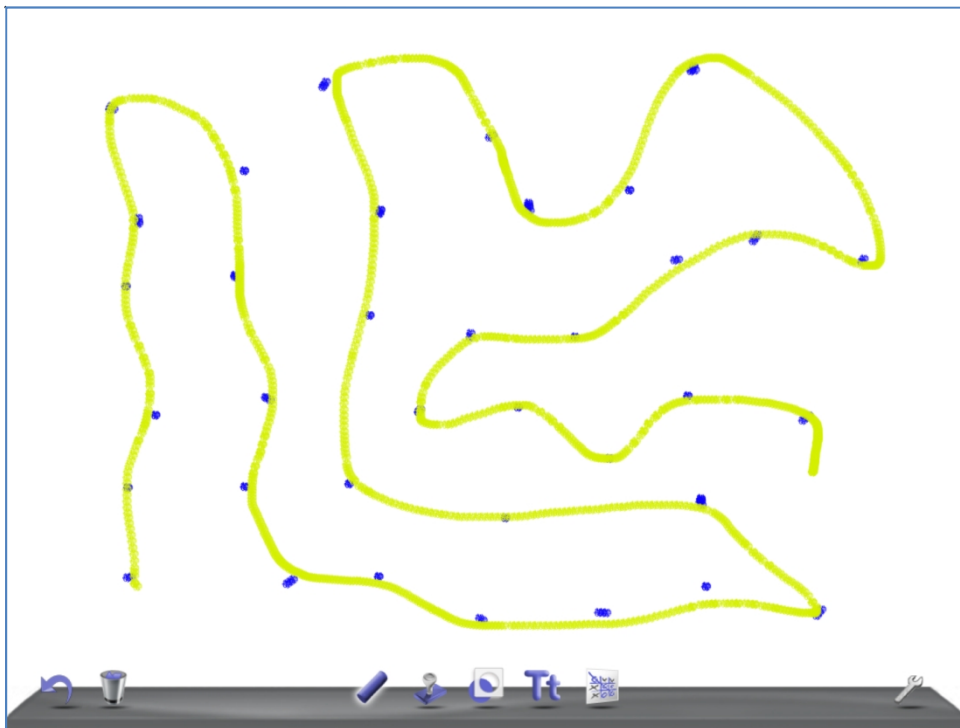
DOT TO DOT

TRAIN: Visual analysis & motor skills.

DESCRIPTION:

1. Make a series of dots and ask your child to join them all up.
2. Each time make the task progressively harder.

Help: Use a stylus pen for the therapy.



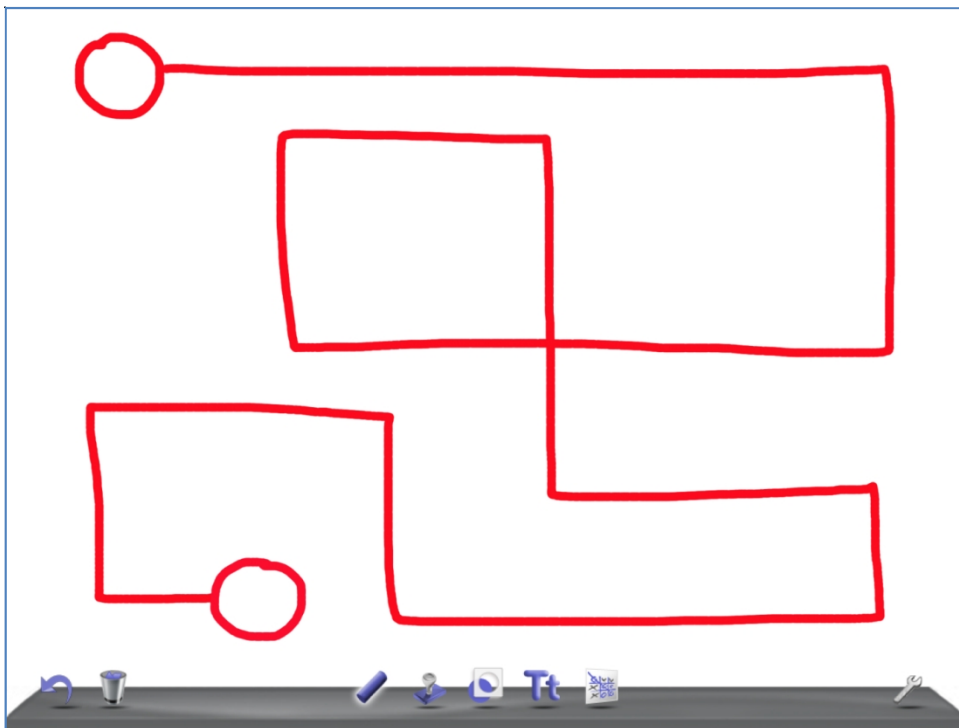
VISUAL TRACE

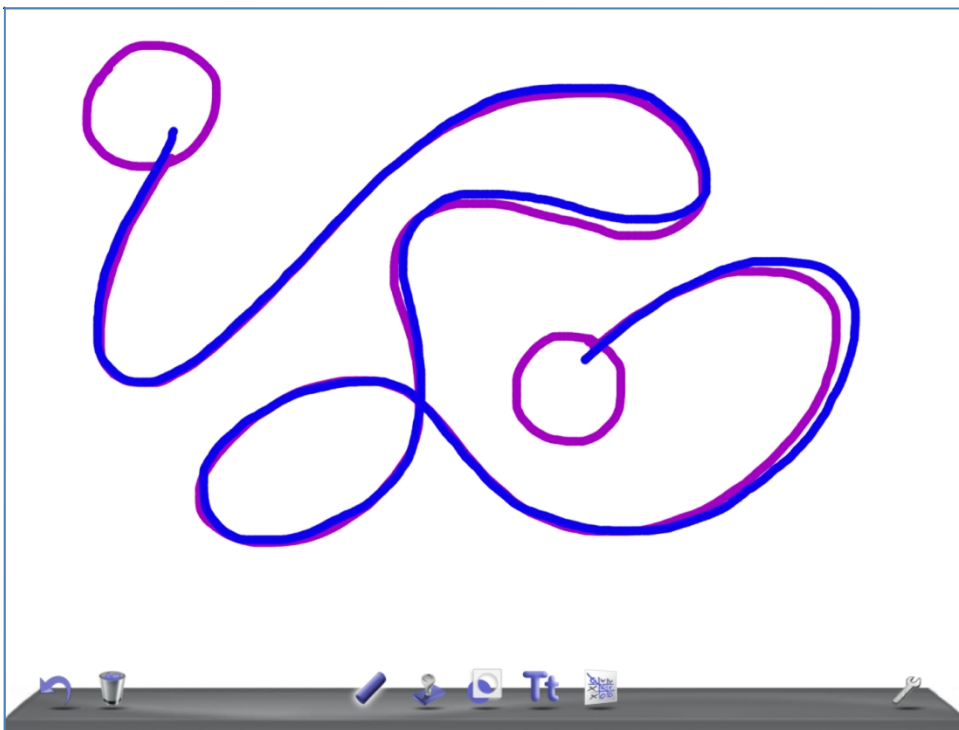
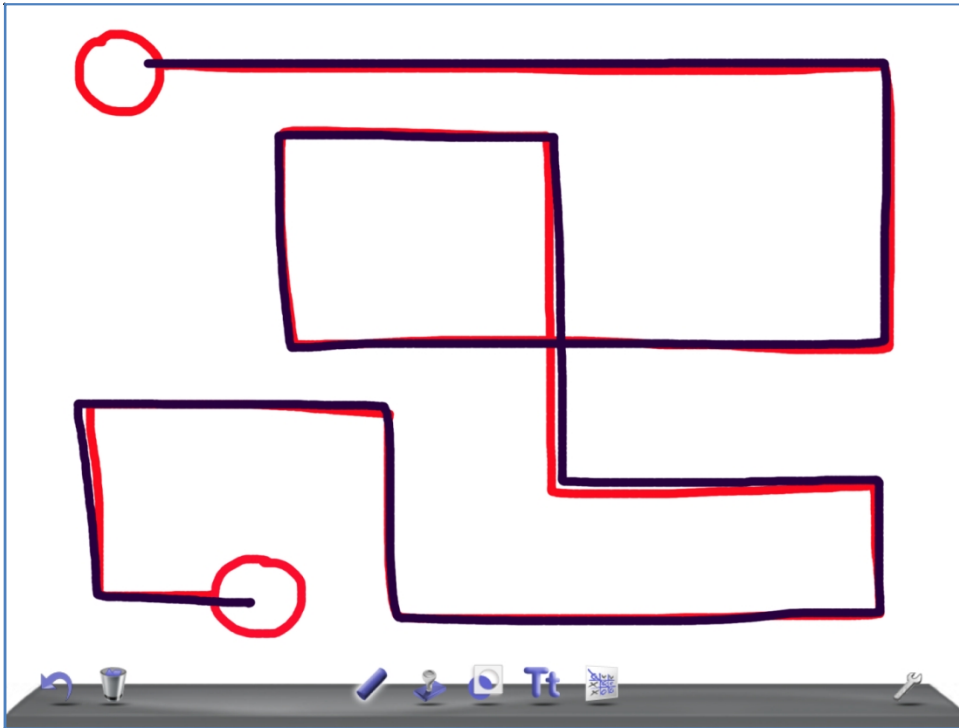
TRAIN: Visual motor skills.

DESCRIPTION:

1. Create some visual patterns and ask your child to trace over the top.
2. Start simple and get progressively more difficult using both circular and angular patterns.
3. Emphasize staying on the line. Ask them how well they think they did after each trace and to show you where they went well off the line!

Help: Use a stylus pen for the therapy.





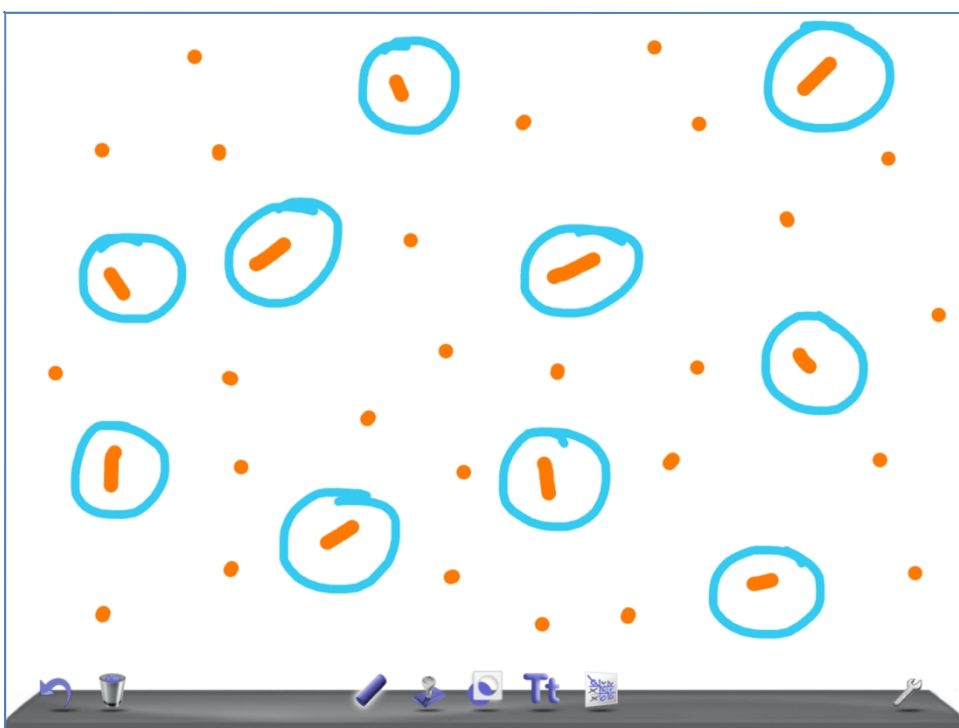
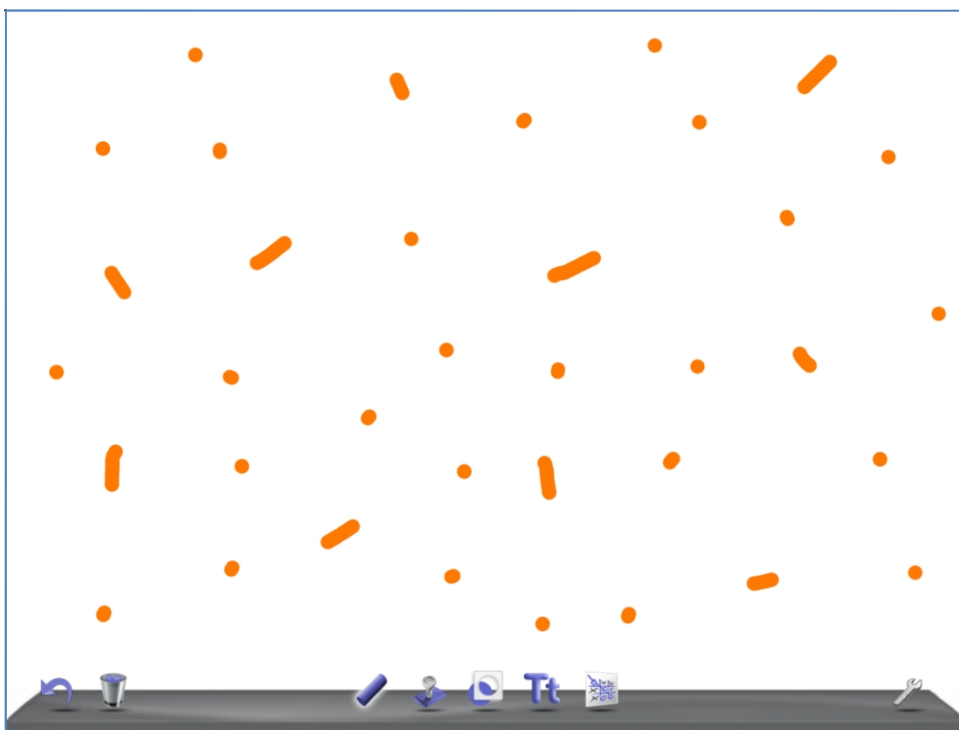
VISUAL SEARCH

TRAIN: Visual analysis, visual search, visual figure-ground.

DESCRIPTION:

1. Make a bunch of dots and dashes the same colour and ask your child to circle the dashes only.
2. Progressively make the task more complex by adding more dots and dashes.
3. When your child has finished ask them to look and see if they missed any.

Help: Use a stylus pen for the therapy.



COUNT IT

TRAIN: Number concept, visual motor.

DESCRIPTION:

1. Put a number of pictures on the screen and ask your child to count them, placing a line through them as they go.
2. Have them check the number by placing a line the other way to make a cross.

Help: Use a stylus pen for the therapy.

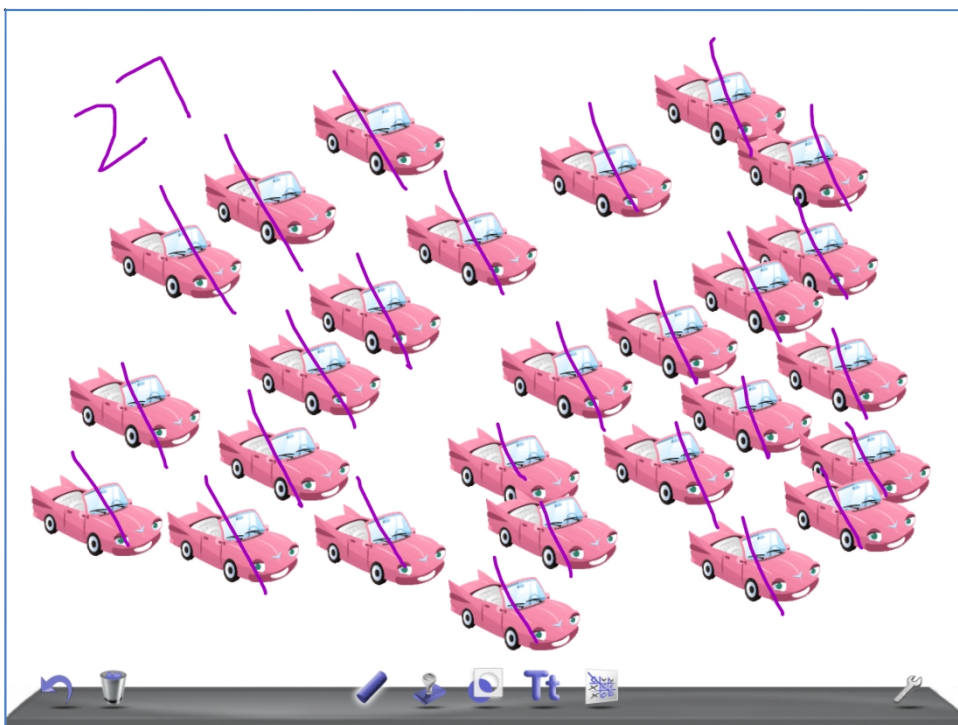
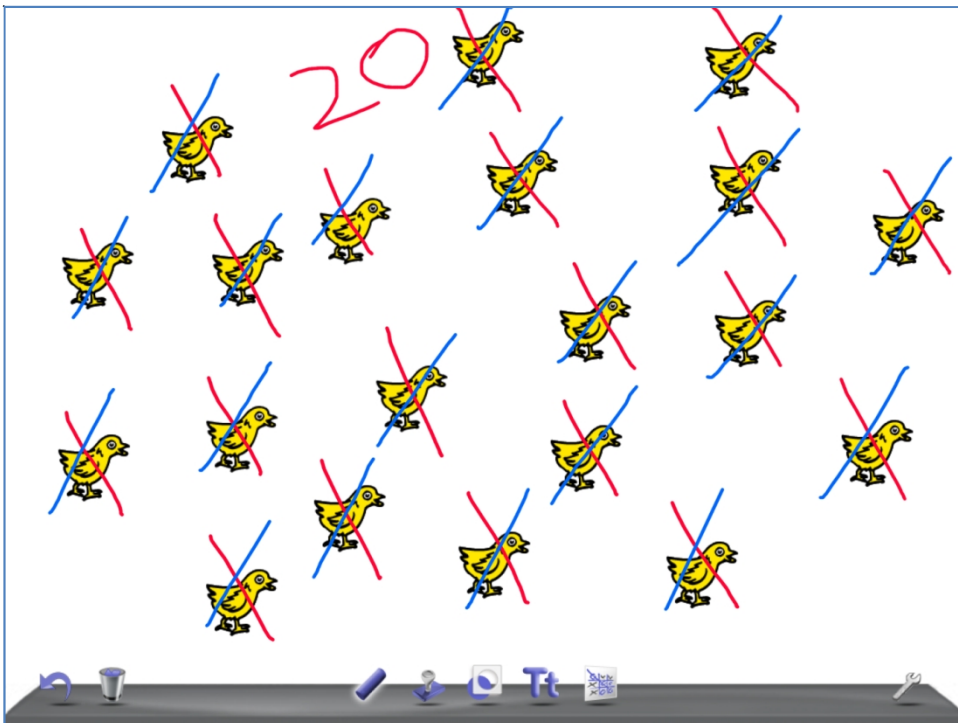


FIGURE IT

TRAIN: Visual figure-ground (sorting important from unimportant).

DESCRIPTION:

1. Position some pictures (the same number) on either side of the screen.
2. Connect the pictures with some tortuous lines. Each picture should connect to a picture on the other side.
3. Have your child trace each of the lines (using a finer line) and to tell you which pictures connect.
4. Progressively make this more difficult with greater complexity and more pictures!

Help: Use a stylus pen for the therapy.



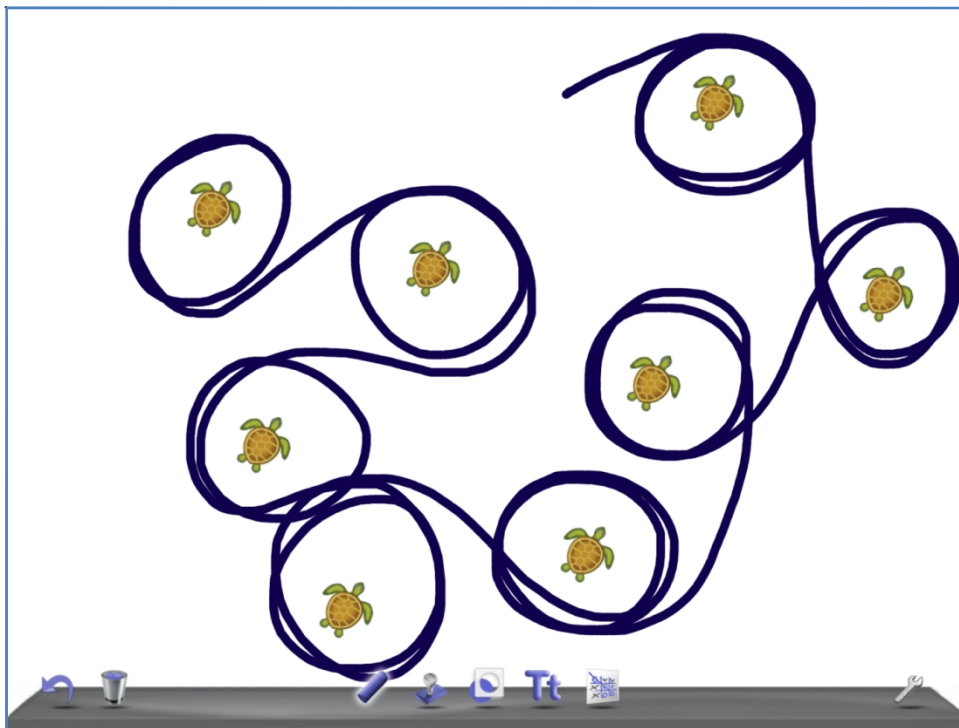
CIRCLE IT

TRAIN: Visual motor skills.

DESCRIPTION:

1. Create some pictures on the screen.
2. Ask your child to circle all the pictures on the screen **WITHOUT** taking the pen off the page!
3. Create different designs, starting with just a few pictures and progressively adding more.

Help: Use a stylus pen for the therapy.



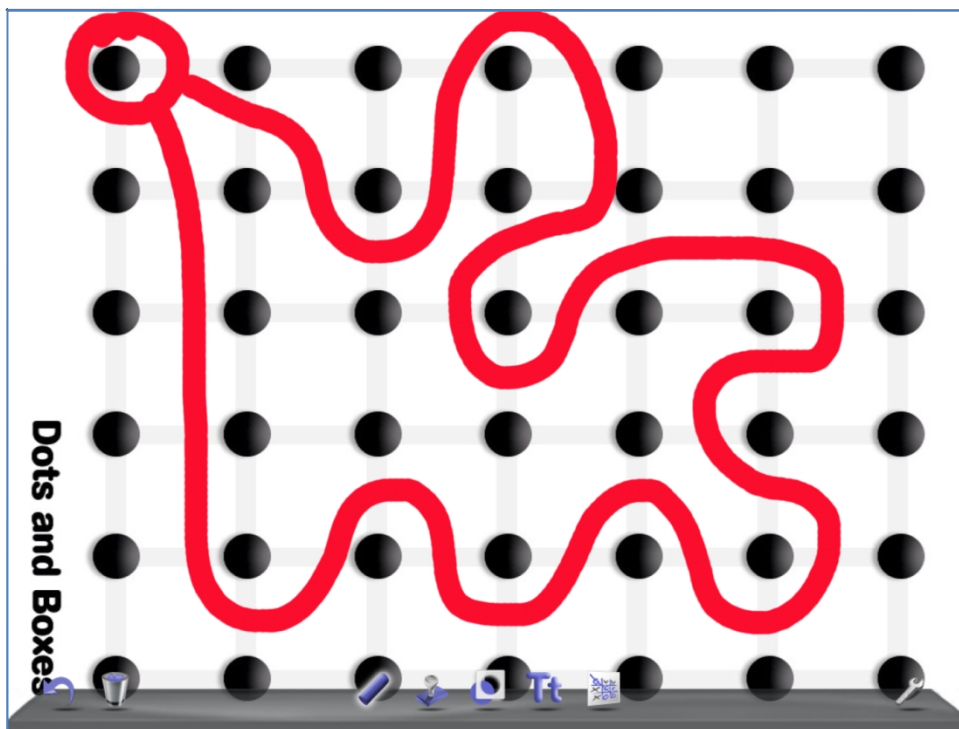
SLIME

TRAIN: Visual motor skills, spatial awareness.

DESCRIPTION:

1. Make a picture of slime by weaving between the dots.
2. Start and finish at the spot circled but you can't go back over a line that has already been drawn!
3. Try *not* to touch the spots and be as creative as possible!
4. If this is too difficult create your own simpler grid.

Help: Use a stylus pen for the therapy.

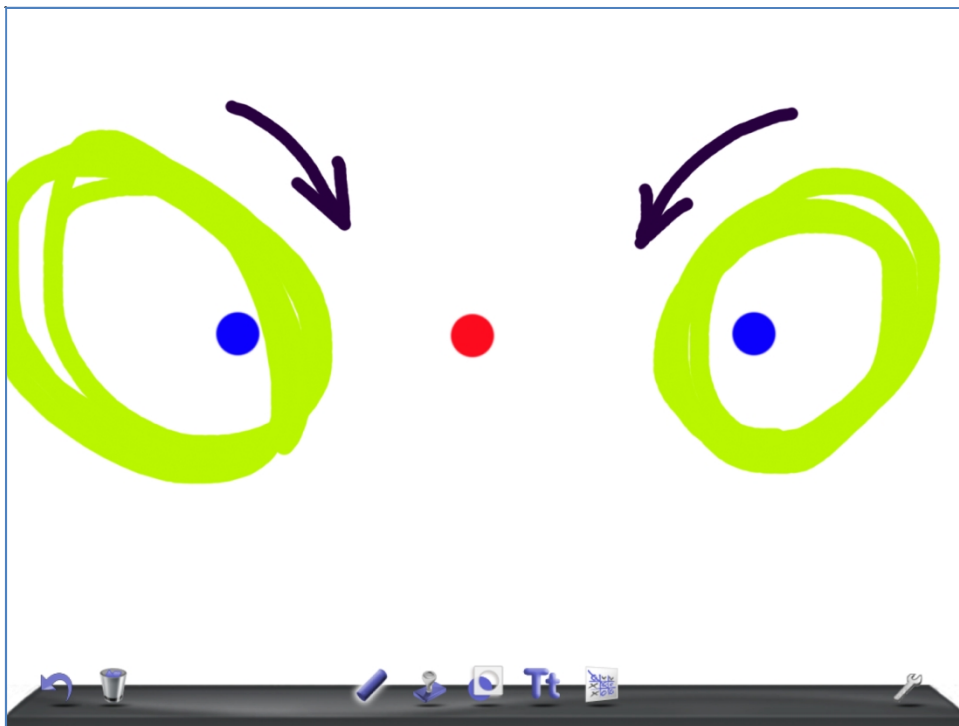


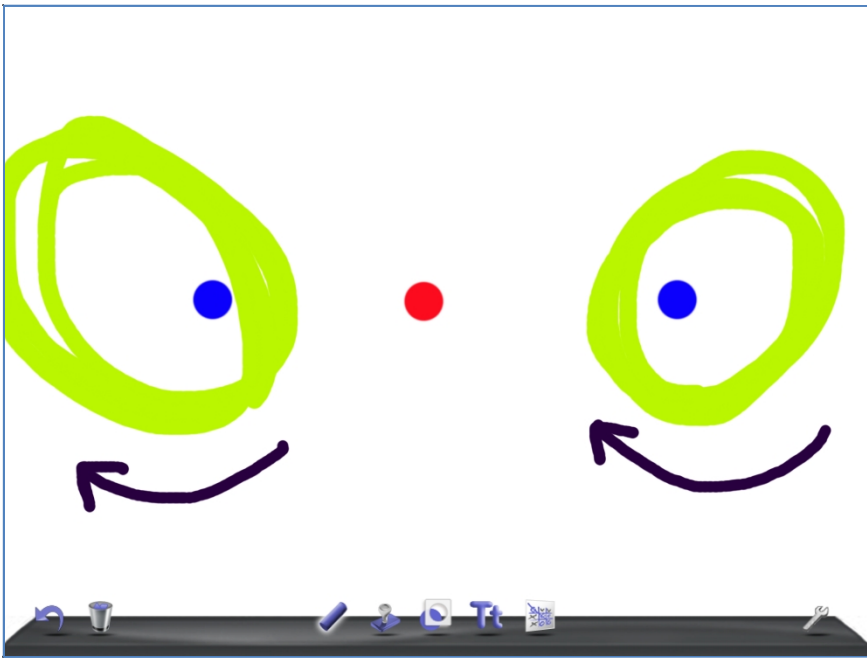
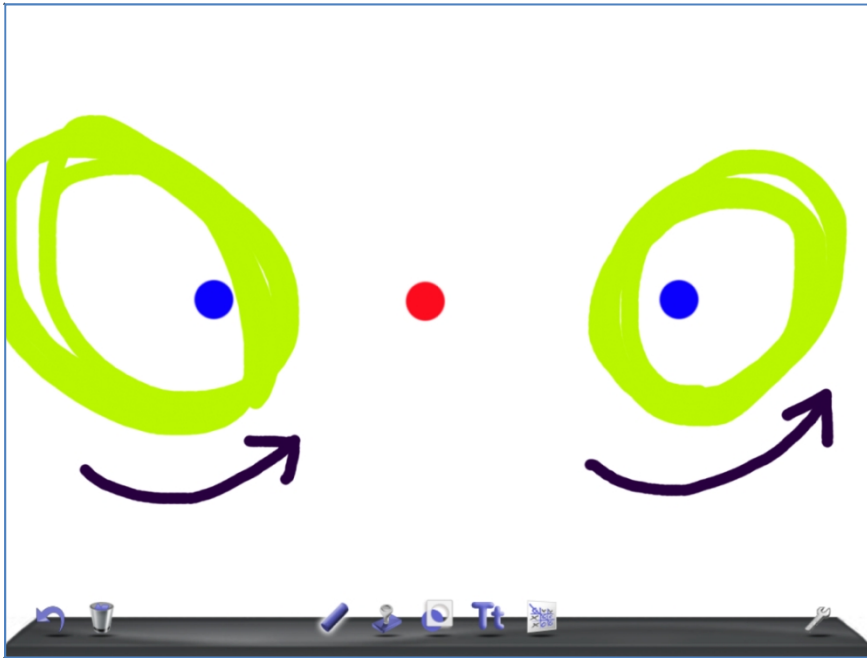
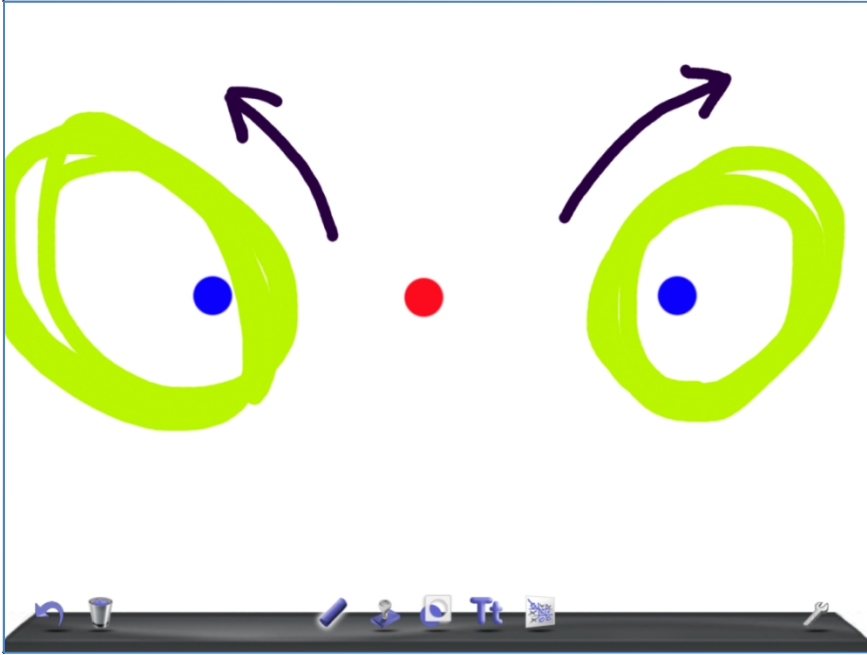
DOODLE CIRCLES-2

TRAIN: Visual motor, spatial awareness, bilateral integration.

DESCRIPTION:

1. For this task your child should be *standing* and the iPad placed on a table or desk upright (but angled) in the stand.
2. Place a spot in the centre and on the left & right side of the screen.
3. Ask your child to look at the central spot and using their fingers to draw circles around the spots on either side at the same time!
 - a. Draw towards the centre
 - b. Draw towards the outside
 - c. Draw both going clockwise
 - d. Draw both going anti-clockwise
3. To increase the difficulty:
 - a. repeat and count out loud to 10 (eg. 10 cycles).





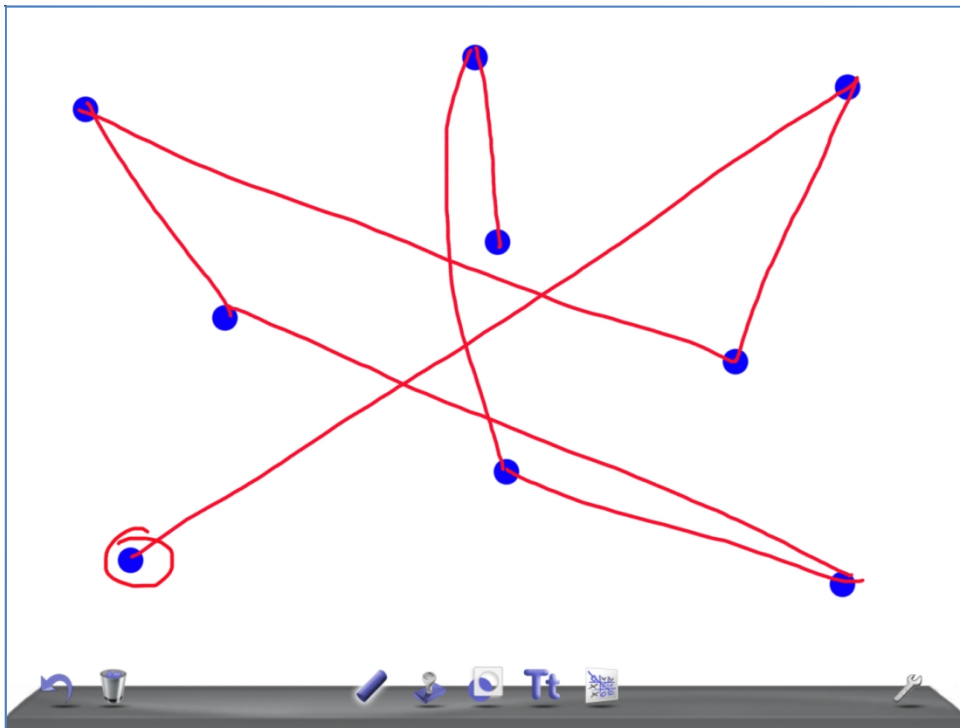
FAR OUT

TRAIN: Visual analysis (judging distance), visual motor & spatial skills.

DESCRIPTION:

1. Create an *odd number* of spots positioned randomly on the screen but spread reasonably apart.
 - a. Start with 5 dots and increase the number with practice!
2. Ask your child to join the dots starting with the one circled.
3. They must connect to the spot furthest away followed by the spot closet.
Keep repeating (furthest-closest-furthest...) until done!

Help: Use a stylus pen to make the dots and for the therapy.



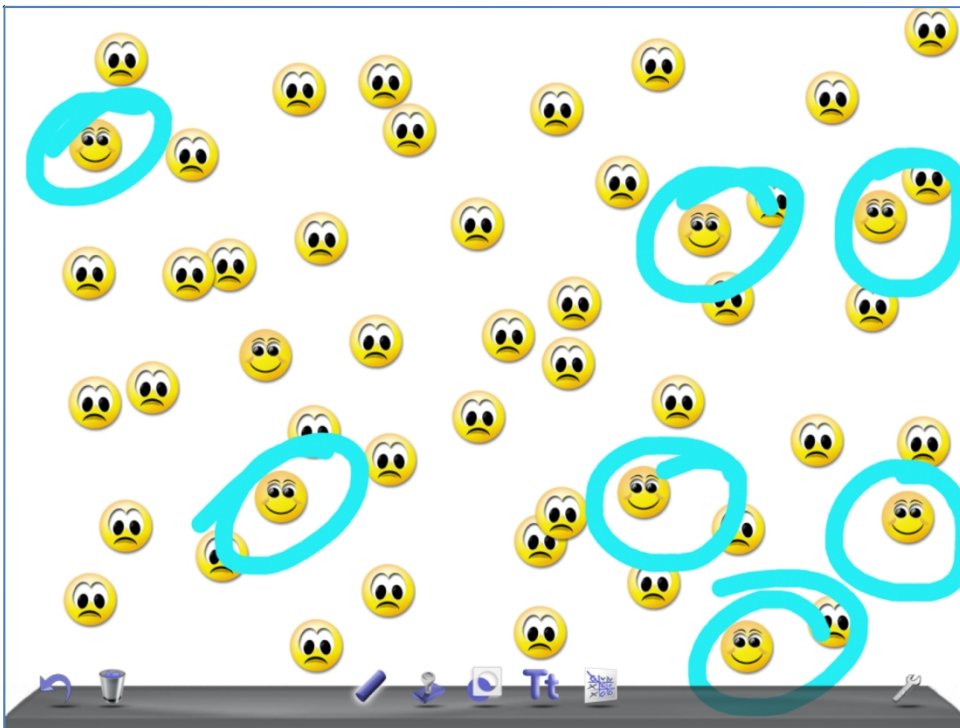
SMILEY FACE TRACK

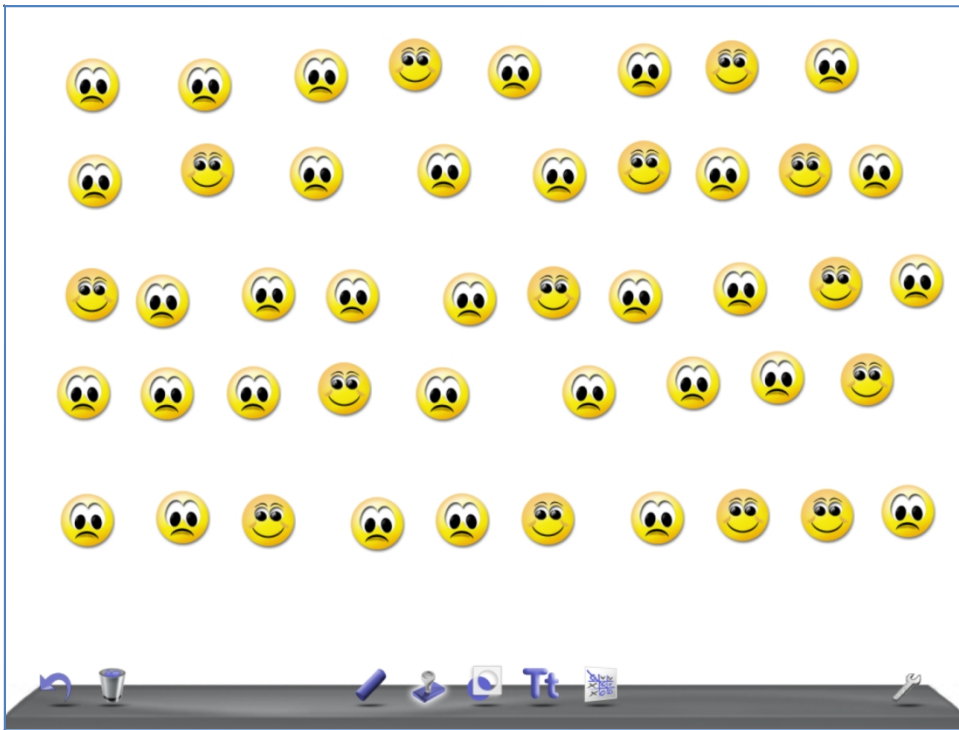
TRAIN: Visual motor, visual spatial and eye hand co-ordination.

DESCRIPTION:

1. Randomly create lots of sad faces with some smiley faces in between. Ask your child to circle the smiley faces!
2. After completing it have them check to see if they got them all.
3. Practice also with a more structured array with the faces in a row. Now ask your child to find the smiley faces reading from left to right.

Help: Start simple get progressively more complicated.





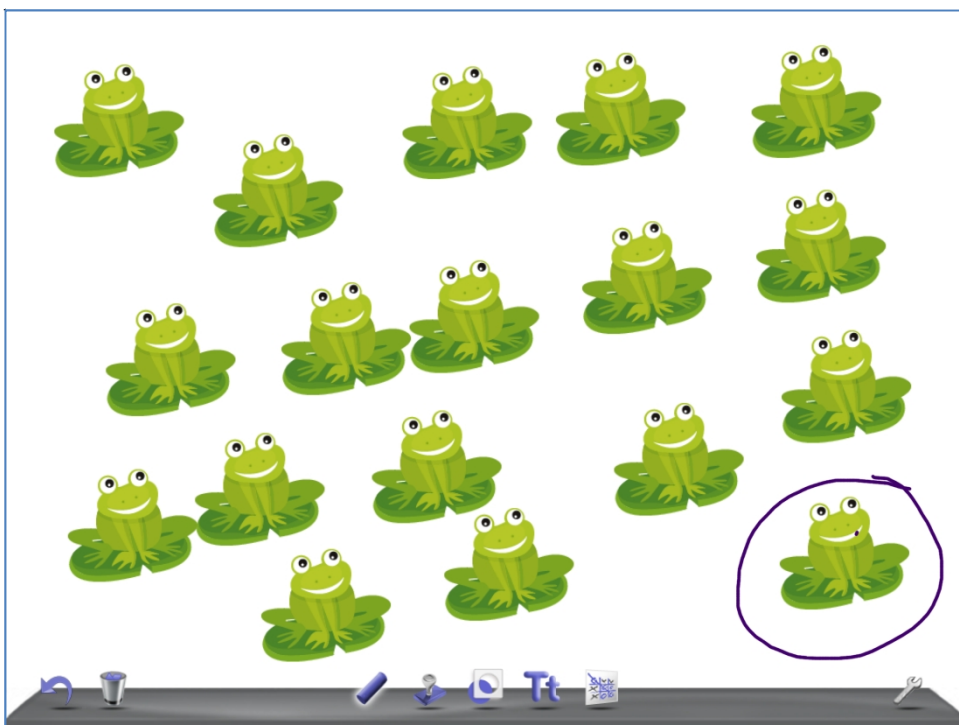
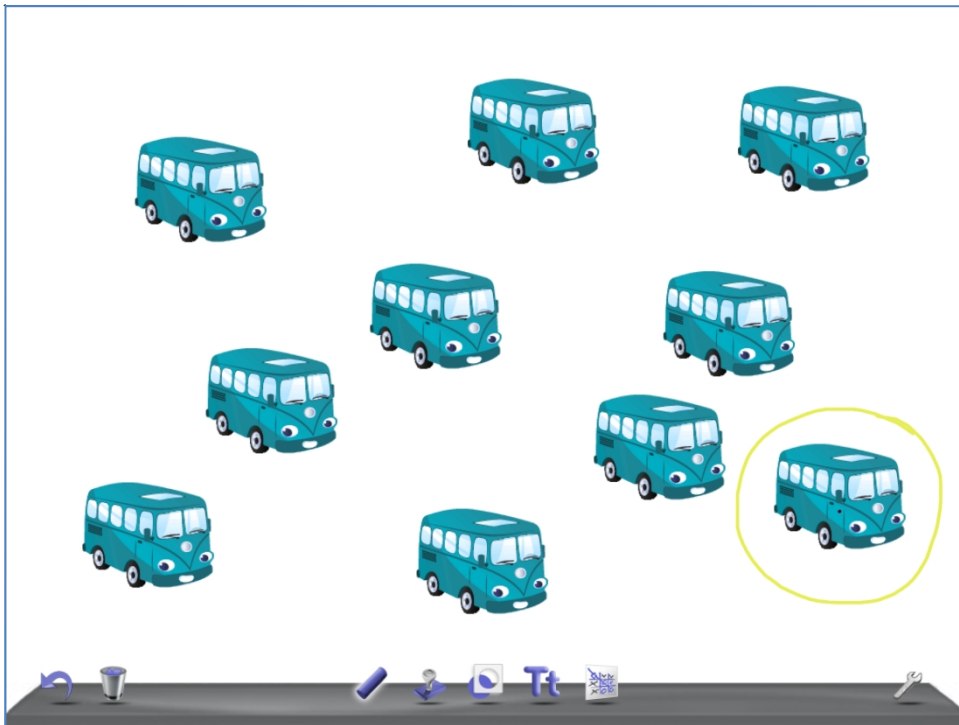
SPOT IT

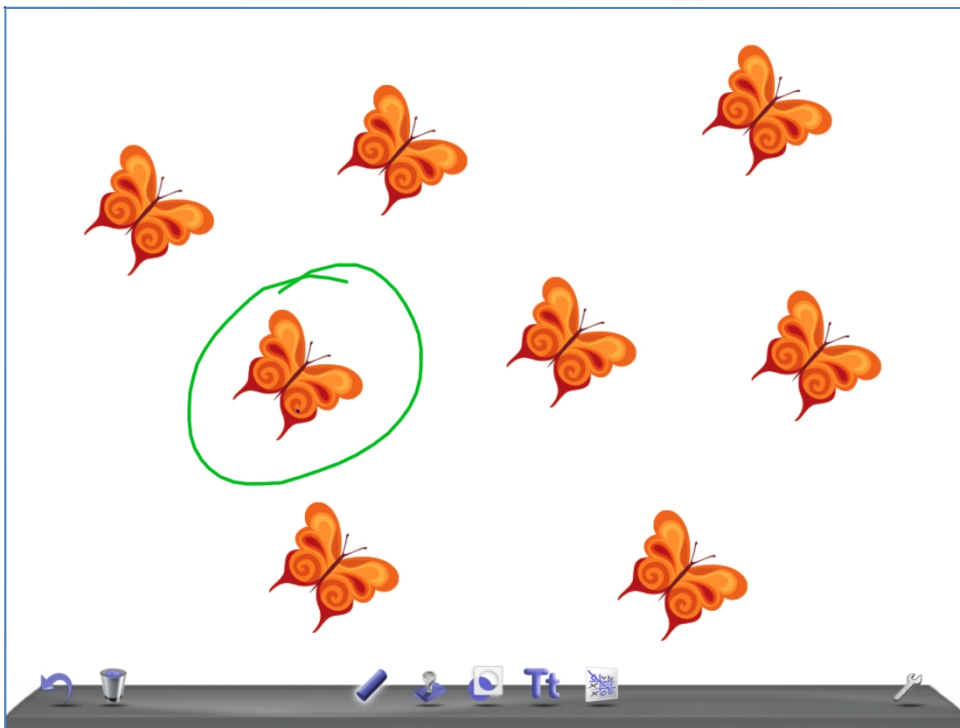
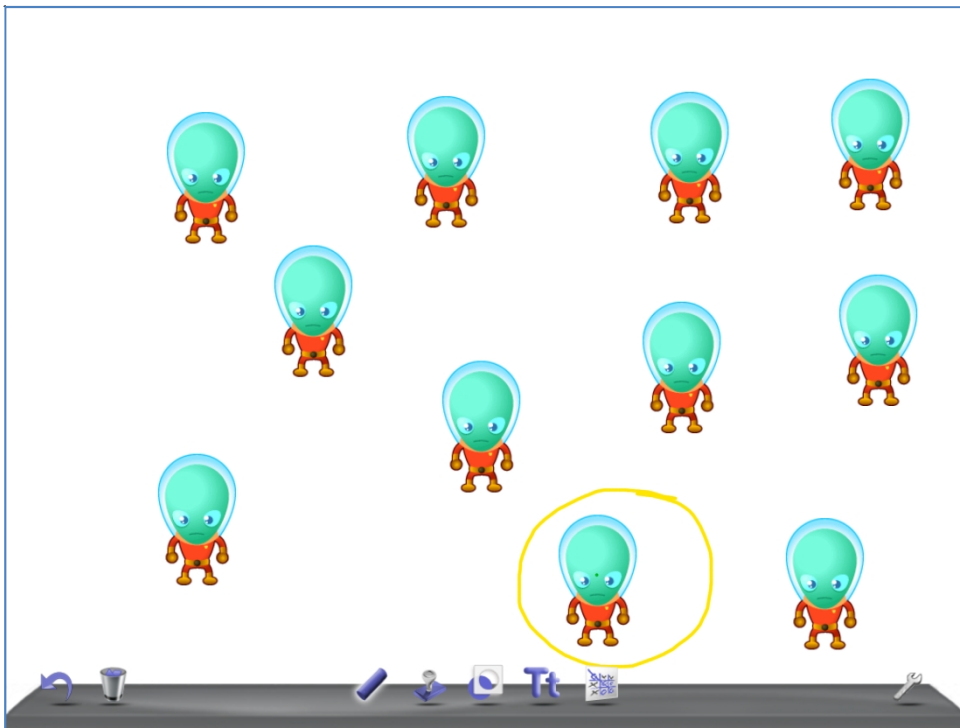
TRAIN: Visual analysis (spot the difference!).

DESCRIPTION:

1. Create a series of pictures & put a dot on one of them for your child to find.

Help: The dot doesn't have to be black.







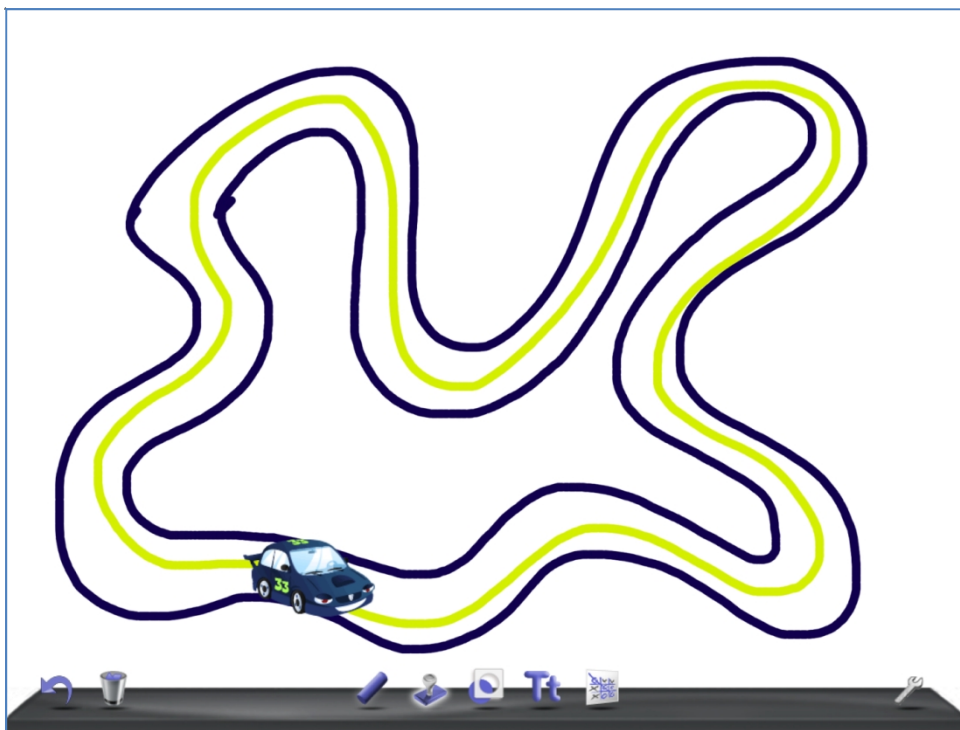
RACE TRACK

TRAIN: Visual motor, visual spatial and eye hand co-ordination.

DESCRIPTION:

1. Create a racing track and put a car (or race flags) at the start position.
2. Ask your child to trace around the track using a stylus pen.
3. Instruct them to try and not to go over the line or take their pen off the screen.
4. Keep repeating this using a different coloured line.
 - o Note: use the back arrow icon to clear the traces.
5. For additional complexity try timing how long it takes to get round the track!
6. Finally, try creating some new tracks.

Help: Use a stylus pen for the therapy.



SPEED DOTS

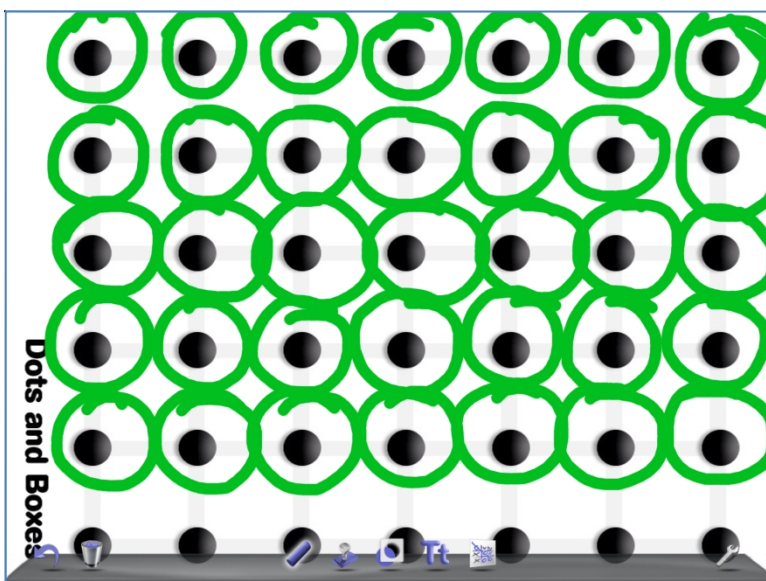
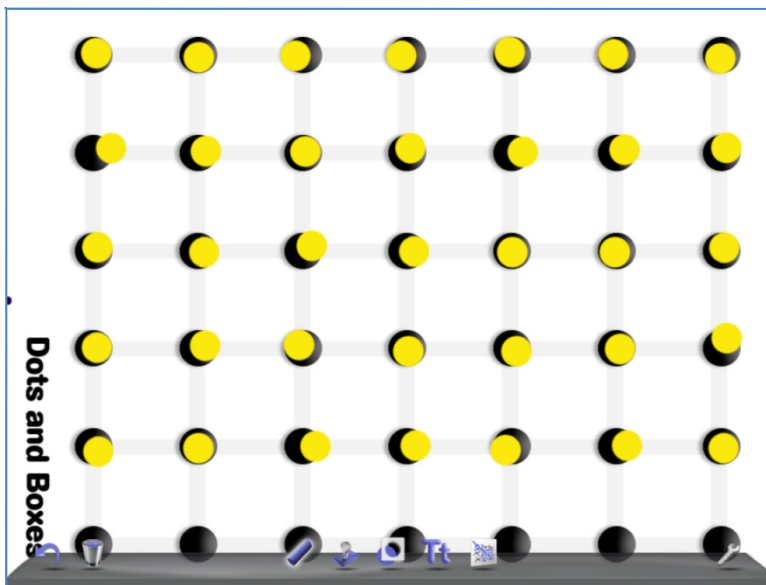


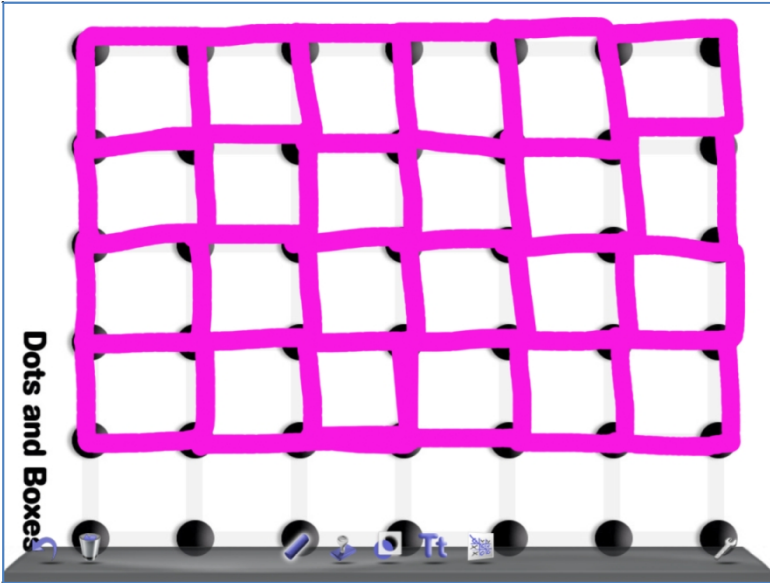
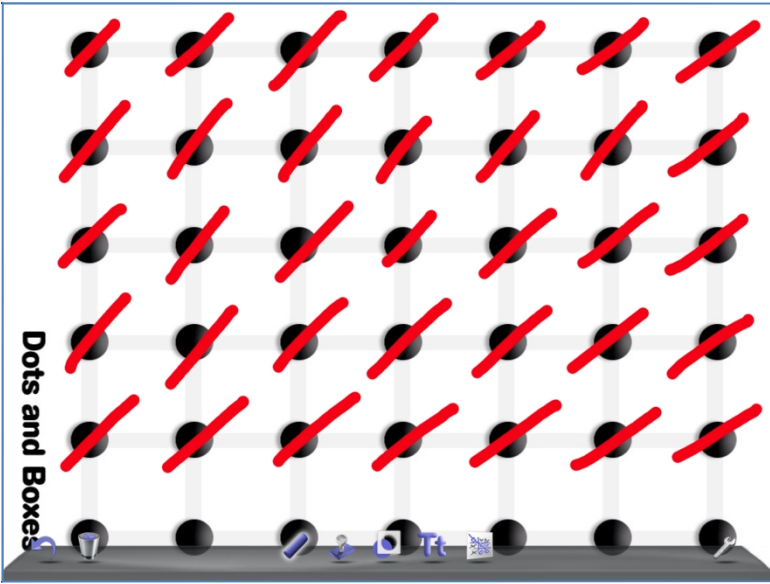
TRAIN: Visual motor skills, visual speed.

DESCRIPTION:

1. Touch all the dots on the grid pattern (except the last row) and time how long it takes on a clock or watch.
2. If any dot is *missed* then the time doesn't count!
3. Repeat this multiple times and try to get a faster time.
4. Also try:
 - a. circling the dots
 - b. putting a line through the dots
 - c. drawing *individual boxes* (cannot draw a line across multiple dots).

Help: Use a stylus pen for the therapy.





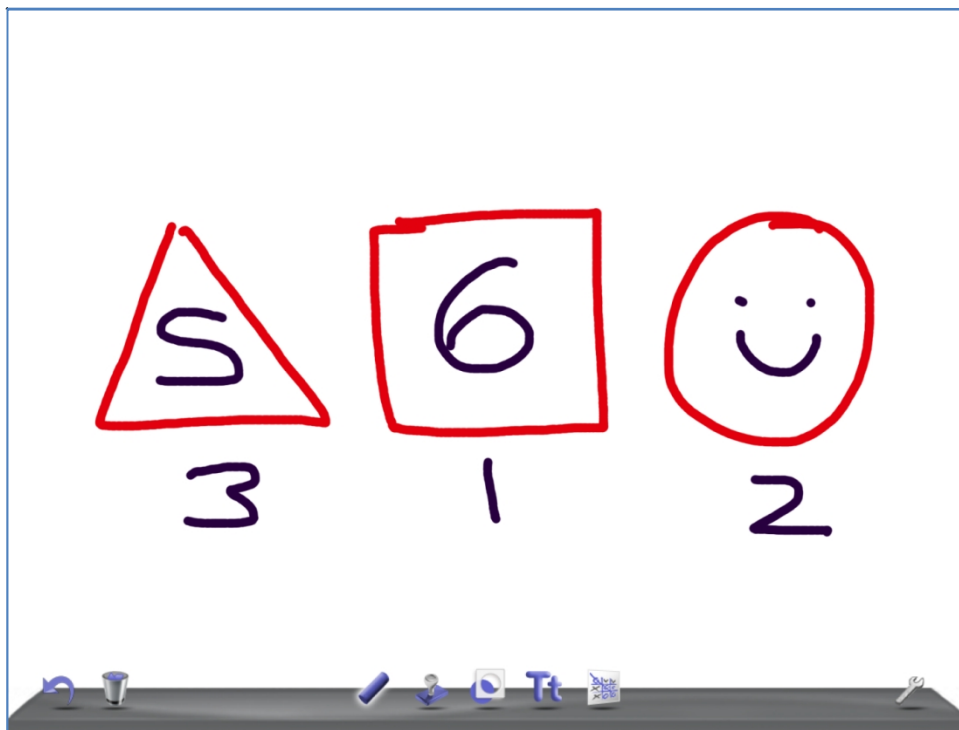
SAY IT DO IT

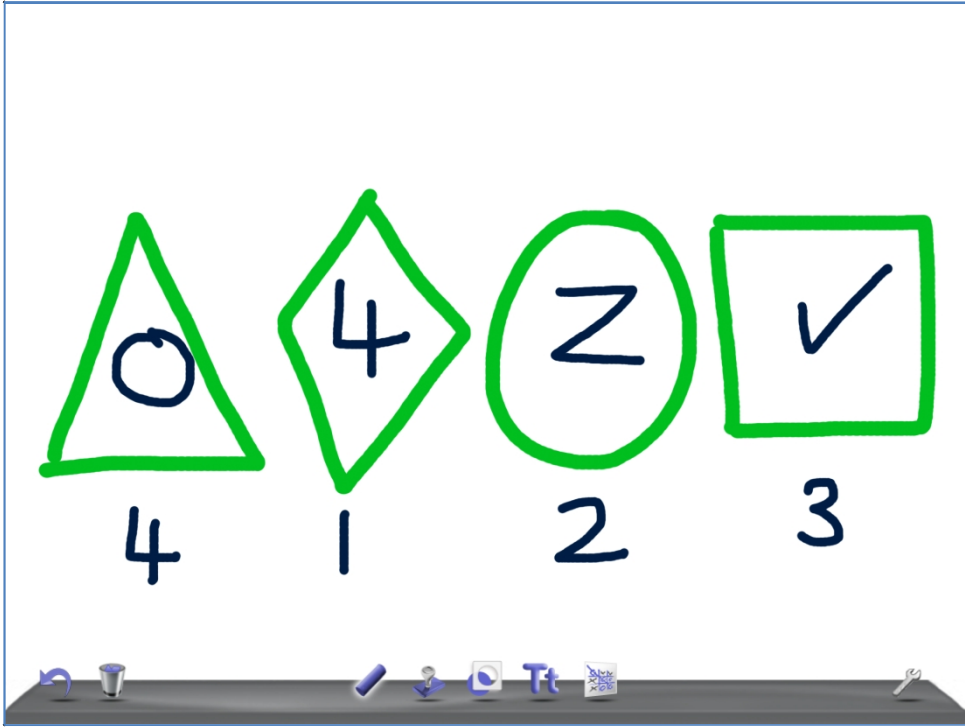
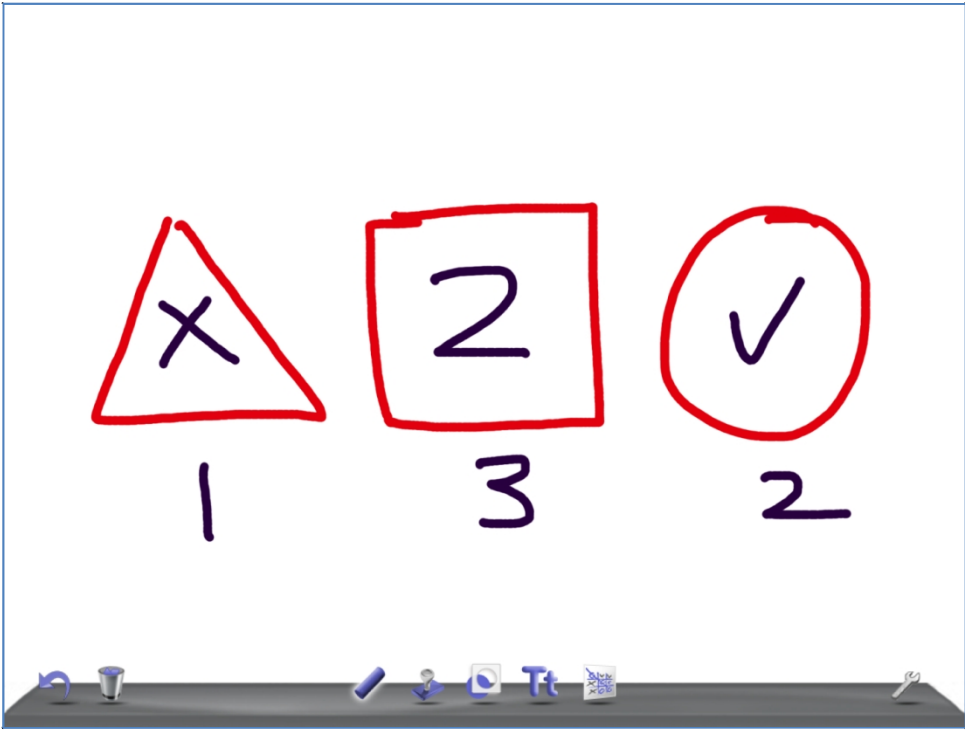
TRAIN: Visual & auditory sequential memory (following instructions).

DESCRIPTION:

1. Create some 3 shapes on the screen.
2. Give your child some instructions.
eg. Put a smiley face in the circle, then an “s” in the triangle and a “6” in the square.
eg. Put a 2 in the square, a tick in the circle and a cross in the triangle.
3. Keep practicing this - If necessary start with 1 or 2 instructions.
4. Increase the difficulty by adding more shapes and the number of instructions.

Help: Use a stylus pen to make the shapes and for the therapy.



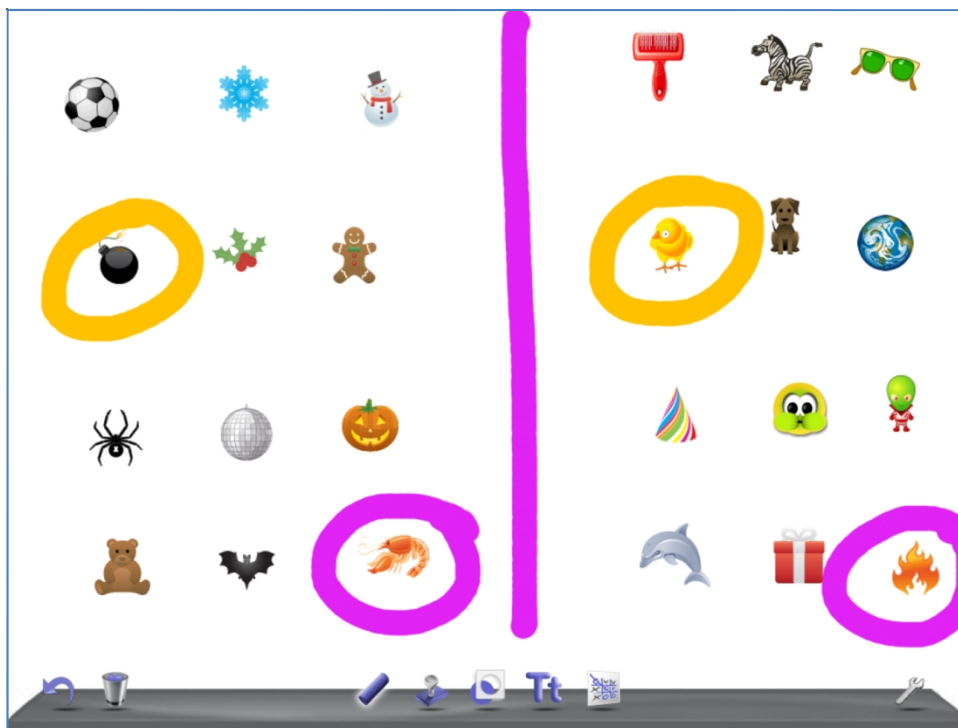


VISUAL MATCH

TRAIN: Visual search, visual spatial and visual memory.

DESCRIPTION:

1. Create an array of pictures on either side of a central line.
2. CIRCLE a picture (or pictures) and ask your child to CIRCLE the matching picture (or pictures) on the other side of the line.
 - Clear the circles around the picture using the back arrow button for each new presentation.
3. When your child can do this well try CALLING out a picture (ie. do not circle it) and ask them to CALL out the matching picture.
4. Gradually increase the number of pictures to recall: aim for 3 to 4 in a row.



PAIR IT

TRAIN: Visual analysis, visual search.

DESCRIPTION:

1. Put up a background picture on the screen and add lots of Doodle Buddy pictures (a pair of each picture).
2. Ask your child to find and circle the matching pairs.



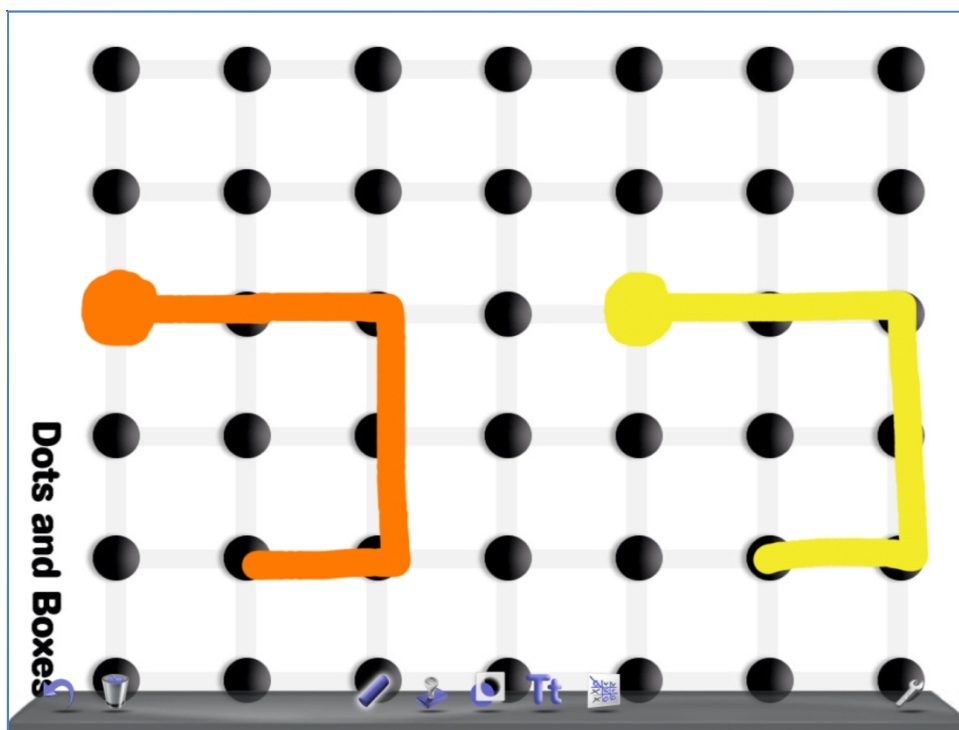
PATTERN ANALYSIS

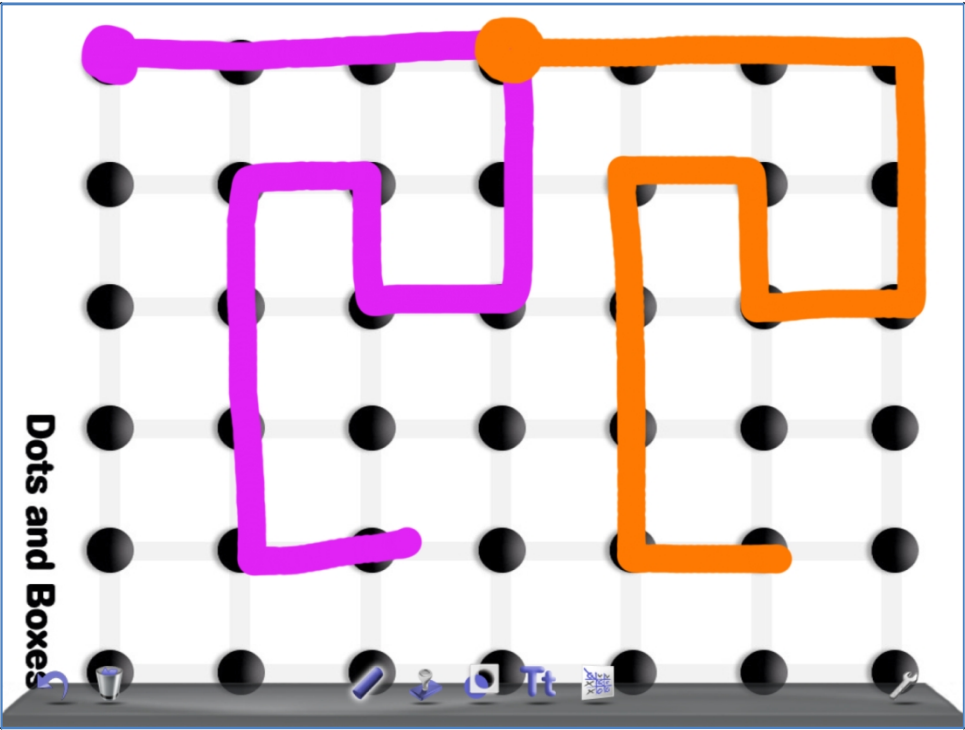
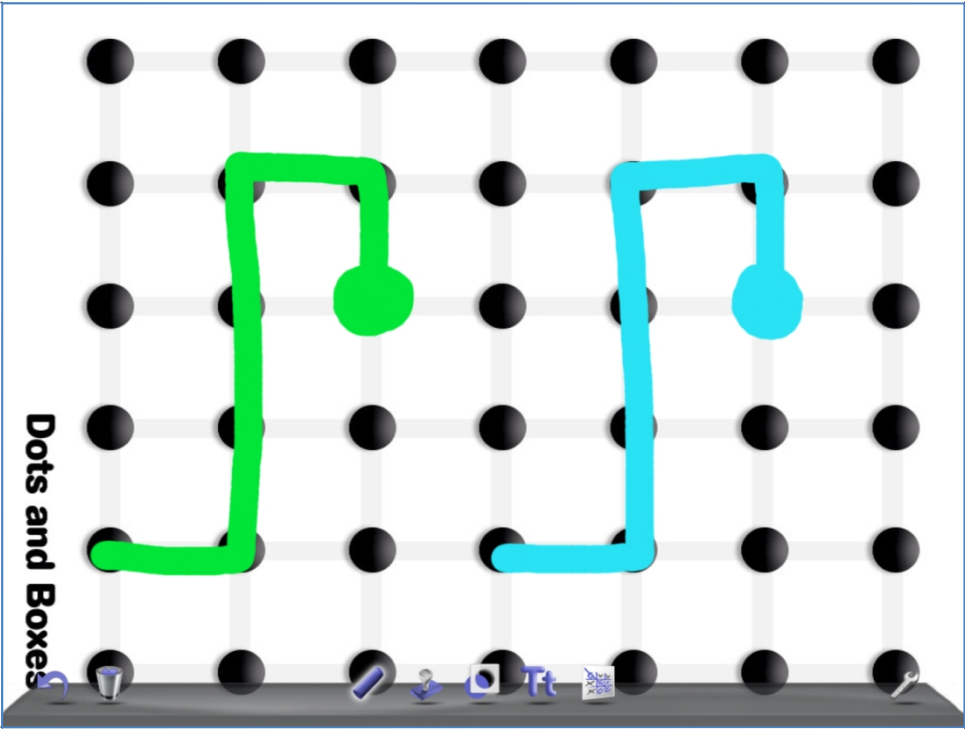
TRAIN: Visual analysis (the parts that make the whole) & visual motor skills.

DESCRIPTION:

1. Select the grid with spots in Doodle Buddy.
2. Create a pattern on one side for your child to follow.
3. Start with a large spot and your child has to make a large spot on the other side of the grid and follow your pattern from there. Ask them if their pattern looks the same as yours.
 - NOTE: if necessary, make the large starting spot for them.
4. As your child improves make the patterns progressively harder!

Help: Use a stylus pen to make the patterns and for the therapy.



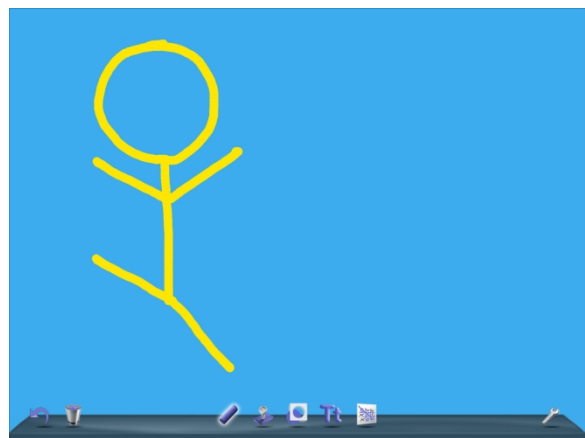
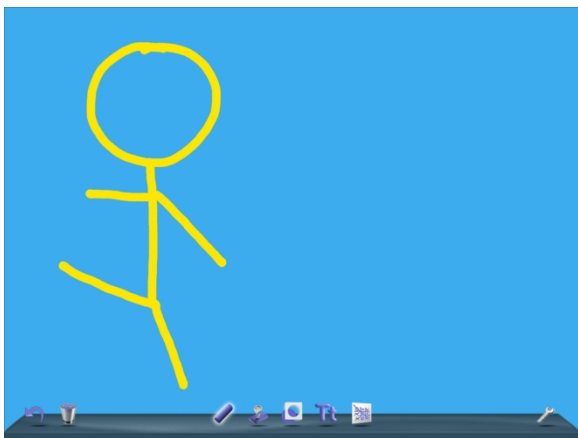
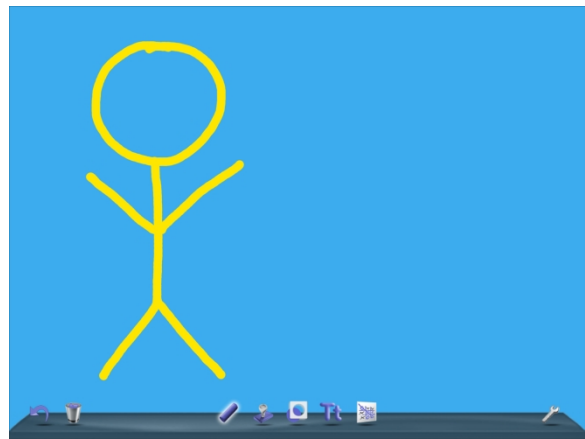
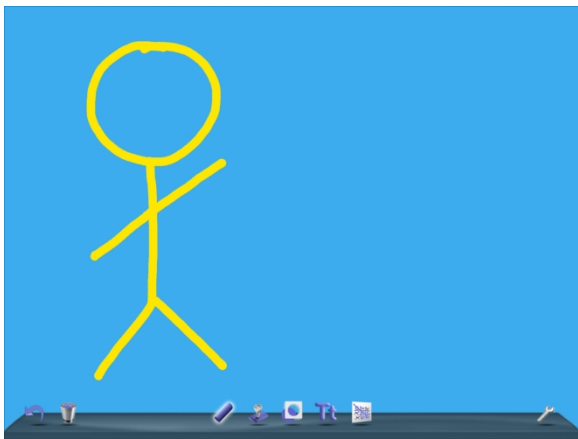
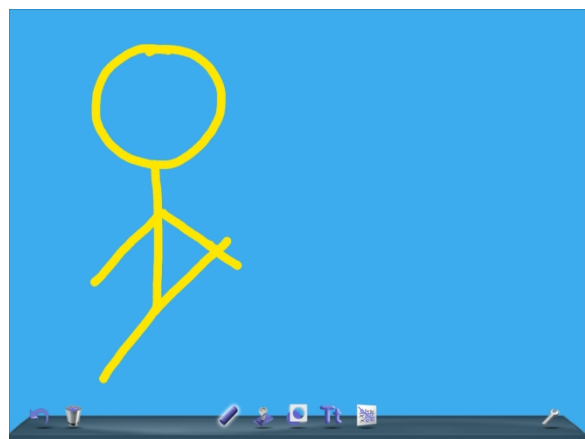
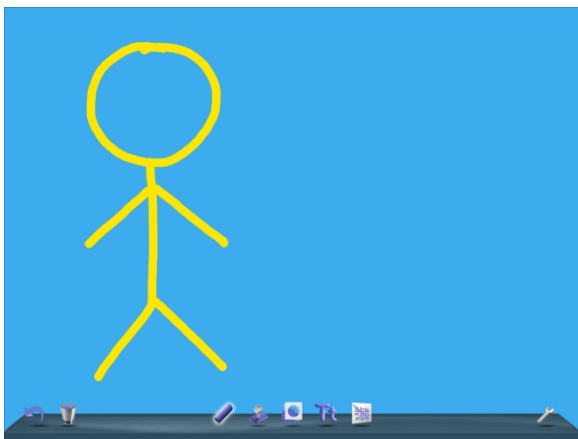


STICK MAN

TRAIN: Visual analysis, spatial concepts, visual motor skills.

DESCRIPTION:

1. Draw a stick man with a stylus and ask your child to copy it next to yours.
2. Vary the angle of the arms & legs to make different combinations.
3. Ask them, “Does yours look the same?” If not, “what do you need to change?”
4. If your child can do this, ask them to draw the arms and legs of their stick man in the *opposite* direction to yours!

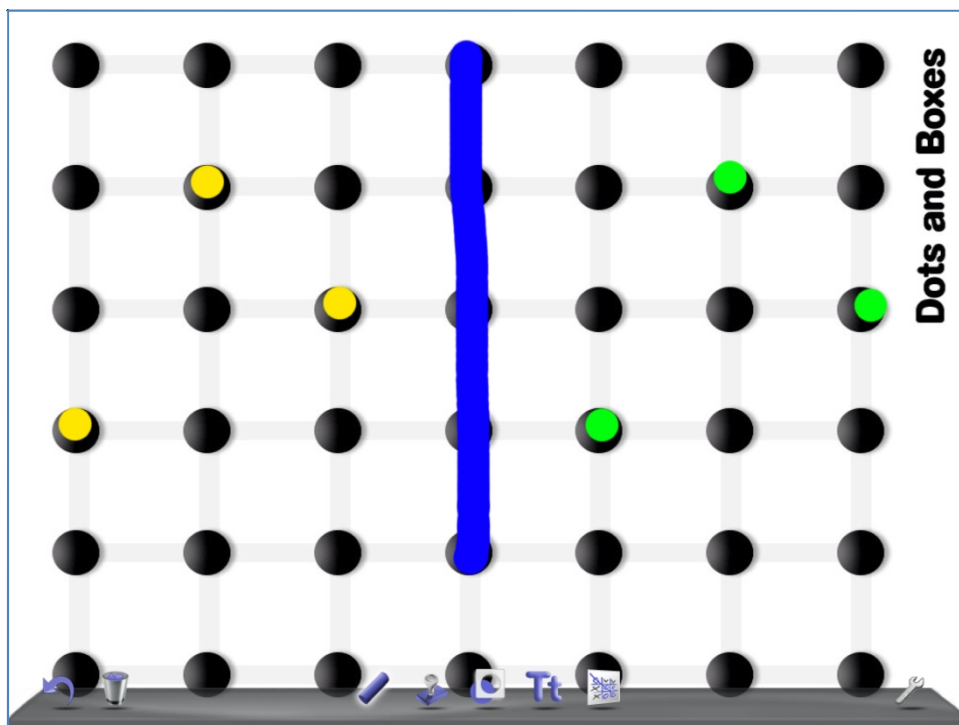
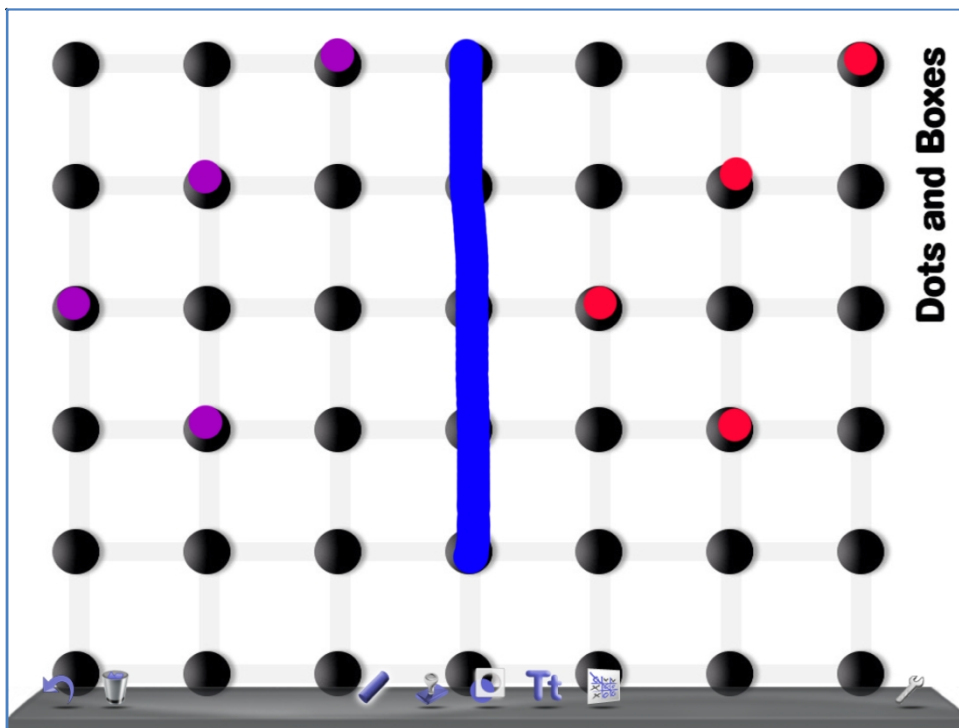


ANALYZER

TRAIN: Visual memory, visualization.

DESCRIPTION:

1. Select the grid with spots in Doodle Buddy.
2. Place a line in the middle and create a pattern of dots on one side for your child to reproduce. Start simple and get progressively harder
3. Try swapping sides and also orientating the iPad lengthwise (so working from top to bottom). Ask if their pattern looks the same as yours!

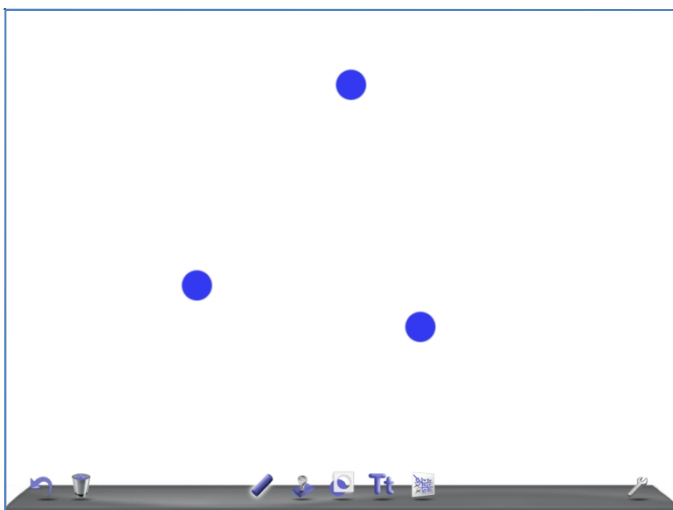
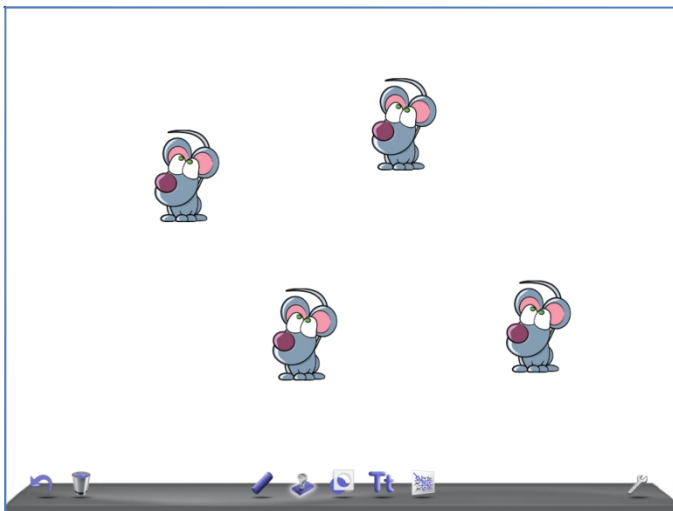


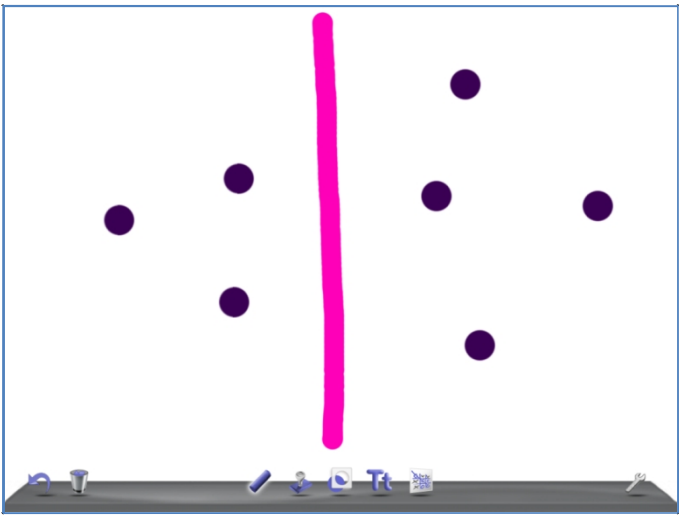
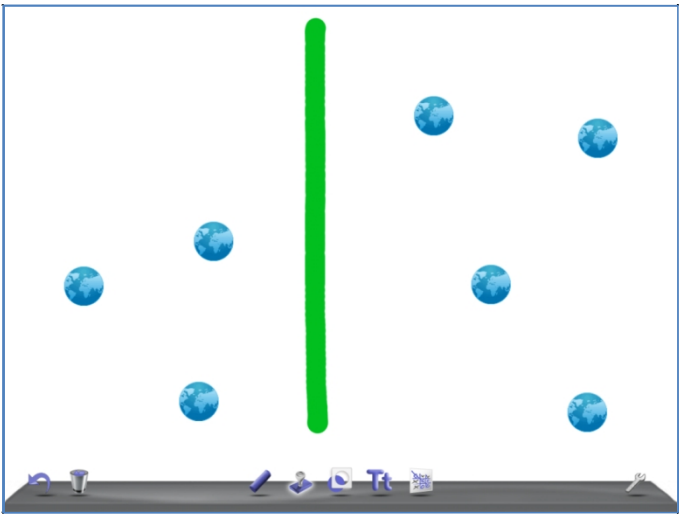
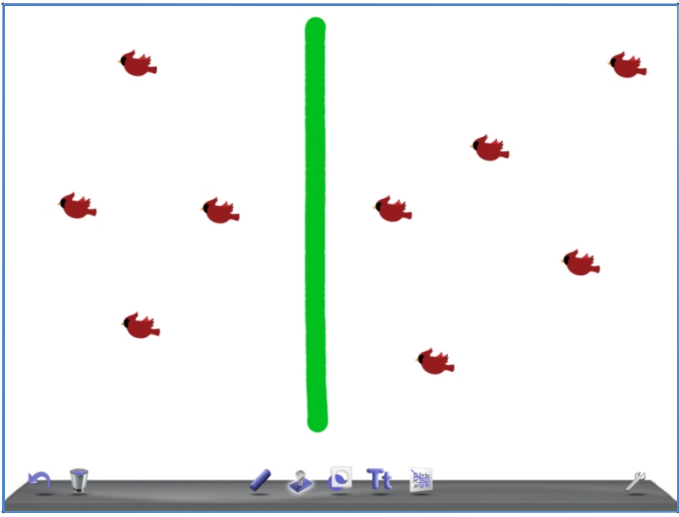
VISUAL COUNT

TRAIN: Number concept, visual memory.

DESCRIPTION:

1. Put some pictures or spots on the screen (starting with just 1) up to a maximum of 5 or 6. *Do not let your child see them.*
2. Minimise the screen using the “Home Button” on the front of the iPad.
3. Show the iPad screen to your child and tap the Doodle Buddy icon.
4. As **quickly as you can** select the home button again to go back to the Doodle Buddy icon.
5. Now ask your child how many pictures or spots they saw.
6. Aim for at least 4 to 5 items which they must get correct *every time*.
7. When this can be done, ask them to compare pictures or spots on either side of a central vertical line flashed for a few seconds. Your child must say if the number is the same or different!





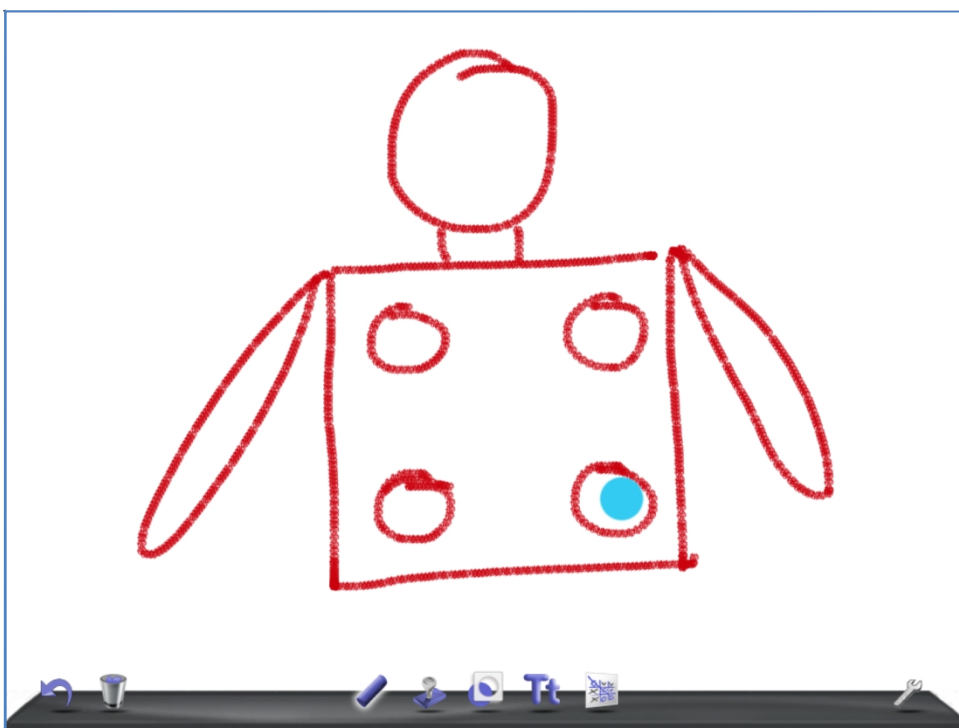
BODY MAP

TRAIN: Visual spatial awareness, letter & number orientation.

DESCRIPTION:

1. Draw a picture of a person on your screen with 4 circles (top right, top left, bottom right & bottom left) as shown below.
2. Have your child stand facing the iPad placed in the upright position.
3. Touch a point on their back and ask them to show you which position you touched looking at the picture on the screen in front of them.
4. When they can do all 4 points then:
 - a. try a sequence of two
 - b. try a sequence of three
 - c. try a sequence of three after a time delay of 10 seconds
 - d. try a sequence of three after getting them to count aloud to 10
 - e. ask them to *look away* from the iPad while you touch their back & then to look at the screen afterwards.
5. If necessary try with 6 points!

Extra: Try “drawing” numbers and letters on your child’s back with your finger before they go to bed at night. Continue to do this for a number of months until your child can consistently identify the numbers and letters.

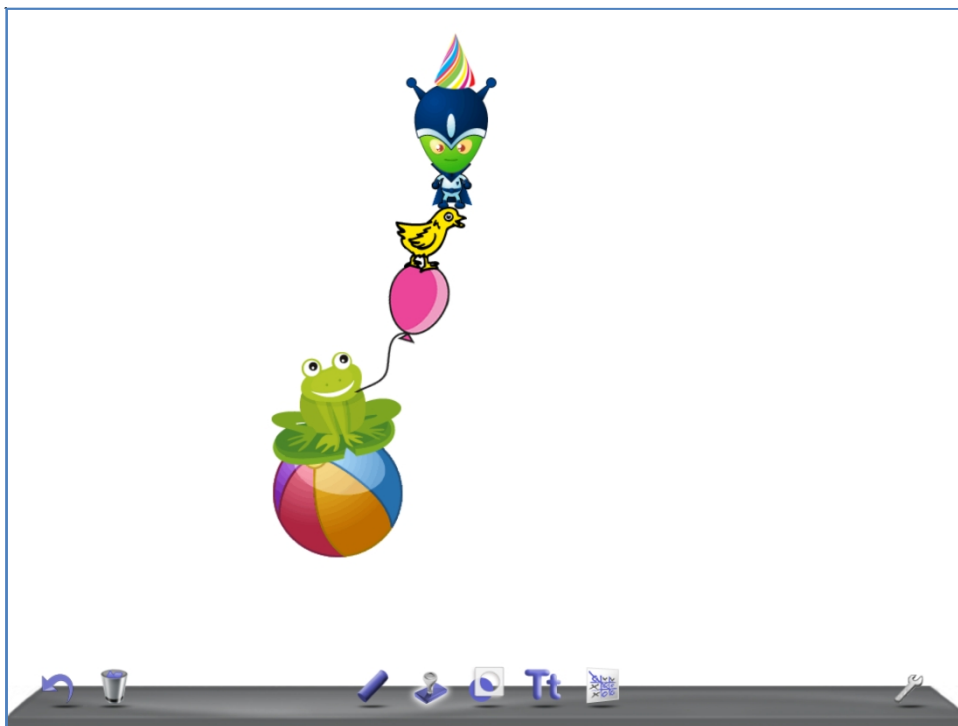


VISUAL MEMORY

TRAIN: Visual memory, visualization.

DESCRIPTION:

1. Put up a picture on the screen and ask your child to describe it in detail (eg. colour and features).
2. Minimise the screen (using the Home Button) and ask them to describe the picture.
3. Now add a second picture and ask them to describe that in detail.
4. Minimise the screen and ask them to describe BOTH pictures and how one relates to the other.
5. Keep adding pictures (eg. “I see a coloured ball that’s purple, red, orange and blue - with a green frog sitting on top with big eyes - and it’s biting on a string with a pink balloon - and a yellow duckling is standing on the balloon”))
6. Continue practicing until your child can describe multiple pictures from memory (eg. see below)!

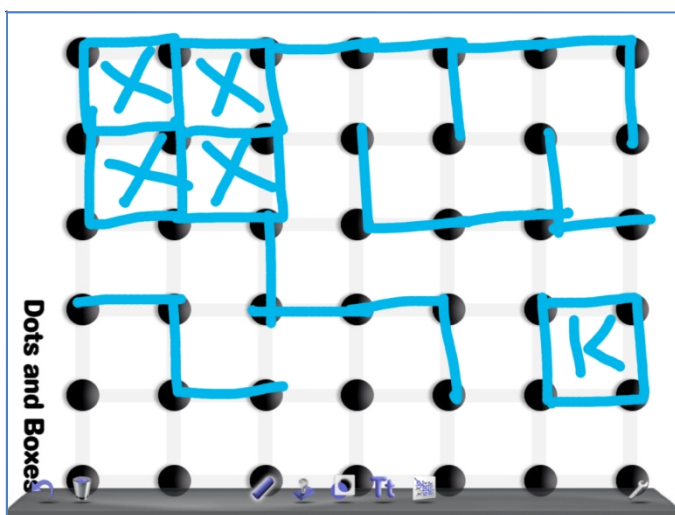
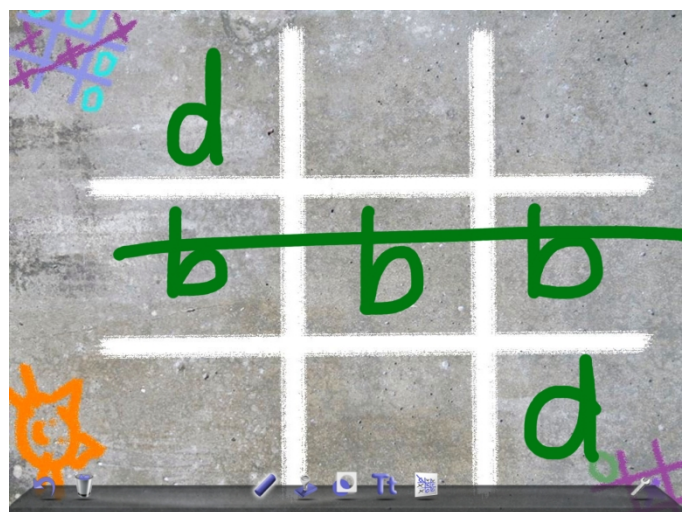
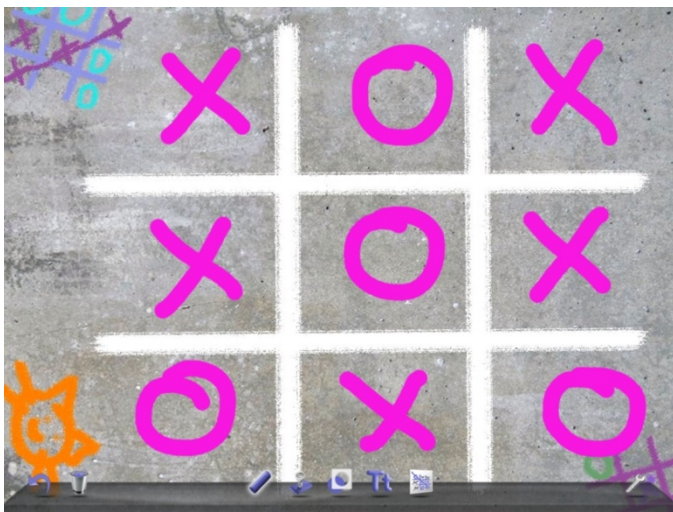


VISUAL THINKING

TRAIN: Visual thinking, spatial awareness.

DESCRIPTION:

1. Select the Noughts and Crosses background in Doodle Buddy.
2. Play *Noughts and Crosses*. The person with 3 in a row wins!
3. Try also using 'b's & 'd's or other letter combinations!
4. Now select the Dots and Boxes background.
5. Play *Join the Dots*. This requires you to alternate and connect any 2 dots with a line. The person who completes a box can put their initial inside the box. The one with the most boxes wins!



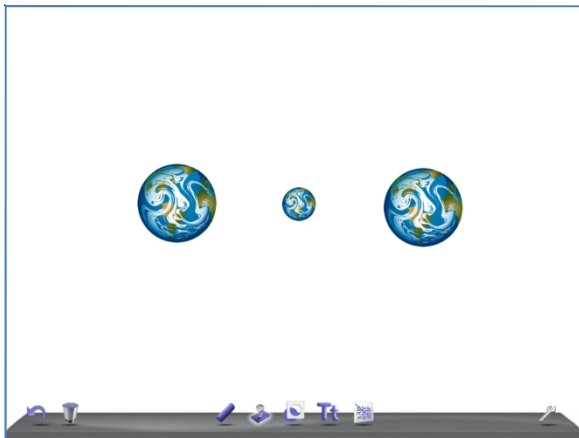
VISUAL AUDITORY THINKING - 1

TRAIN: Visual analysis, auditory analysis (discrimination).

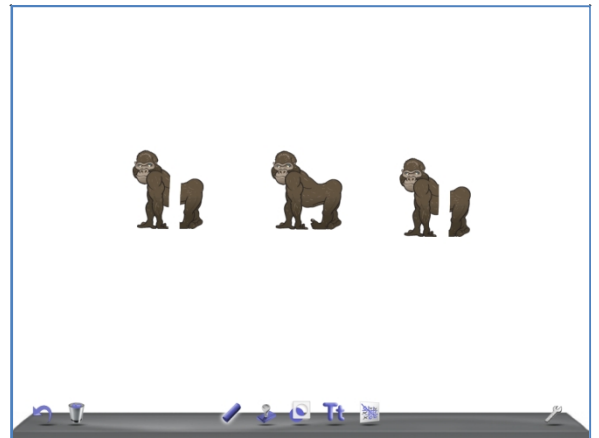
DESCRIPTION:

1. There are 3 different sounds each with their own visual representation:
 - a. volume (eg. loud/soft/loud..... “SHHH/shhh/SHHH”)
 - b. gap detection (eg. gap/no gap/gap “ch-ch/chhh/ch-ch”)
 - c. frequency (eg. high/low/high.... “bip/bip^{/bip}”)
2. Show your child the pictures that relate to each type of sound and get them to sound out what they see.
3. Practice different sound combinations with different pictures.
4. Try and reach a combination of at least four sounds.

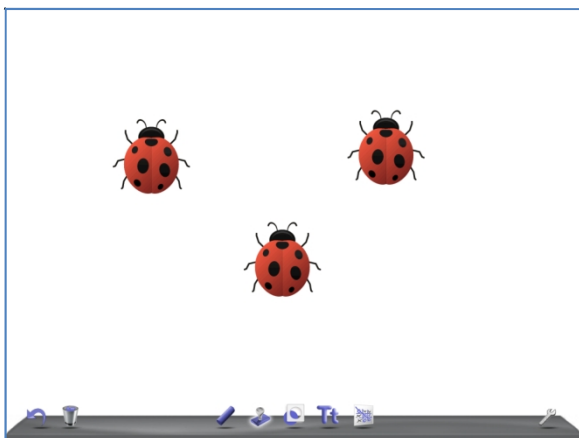
a. VOLUME



b. GAP DETECTION



c. FREQUENCY



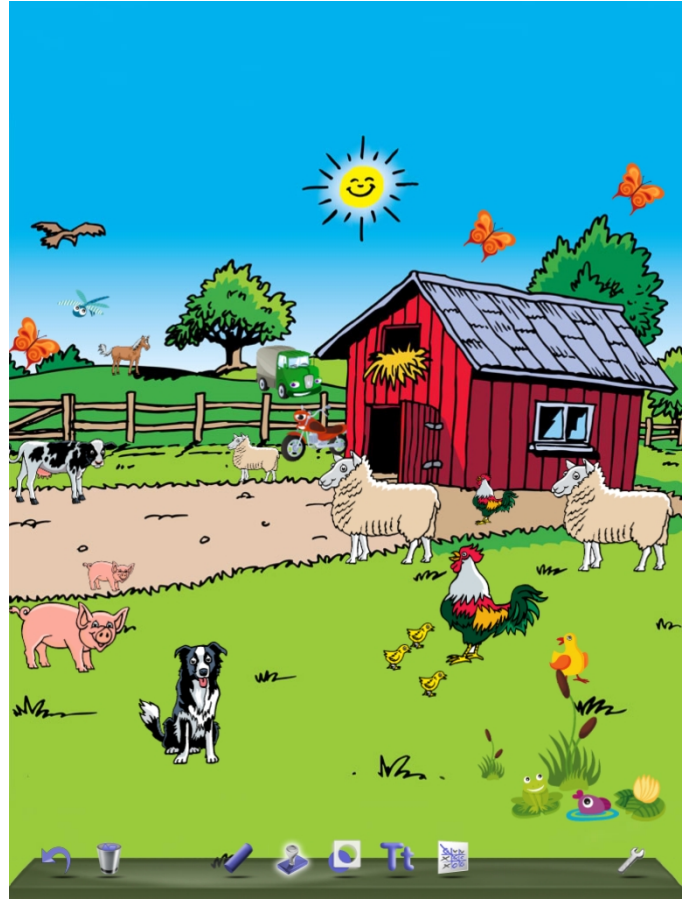
VISUALIZING PICTURES

TRAIN: Visualization, visual recall.

DESCRIPTION:

1. Select a background and create a picture together.
2. Ask your child to describe the picture in detail.
3. Minimise the picture by selecting the Home Button or turn the iPad around so it can't be seen and ask your child to describe the picture again.
4. Now ask them some questions about the picture.
 - eg. describe the picture again for me
 - eg. how many fish were there?
 - eg. what colour were the fish?
 - eg. what colour was the dragon fly?
 - eg. where was the spider in the picture? etc





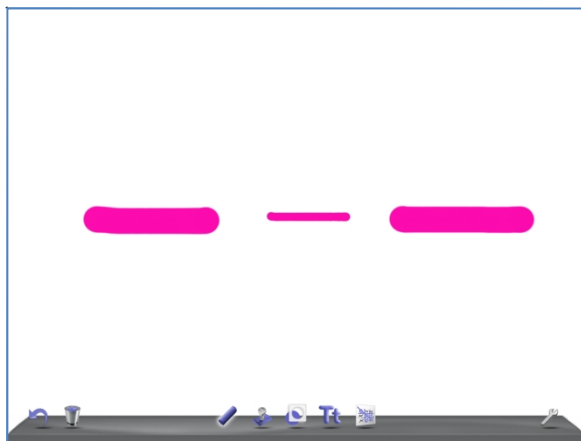
VISUAL AUDITORY THINKING - 2

TRAIN: Visual analysis, auditory analysis (discrimination).

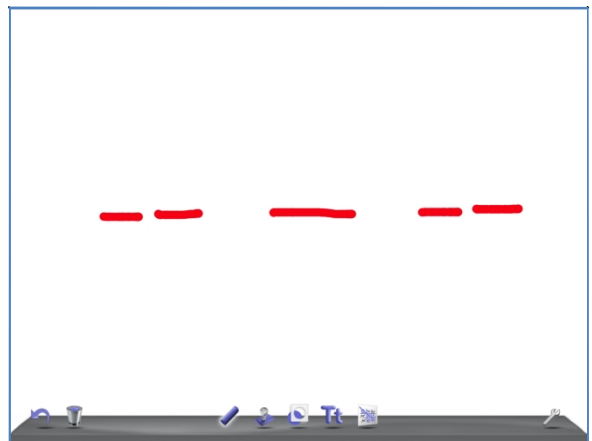
DESCRIPTION:

1. As with Visual Auditory Thinking -1, there are 3 different sounds each with their own visual representation:
 - a. volume (eg. loud/soft/loud..... “**SHHH**/shhh/**SHHH**”)
 - b. gap detection (eg. gap/no gap/gap “ch-ch/chhh/ch-ch”)
 - c. frequency (eg. high/low/high.... “bip/bip^{/bip}”)
2. This time use lines to relate to each type of sound and have your child sound out what they see.
3. Practice different sound combinations.
4. *When they can do this, try making a sound combination and have your child DRAW lines that correspond to the sounds on the iPad!*
5. Try and reach a combination of at least three to four sounds.

a. VOLUME



b. GAP DETECTION



c. FREQUENCY



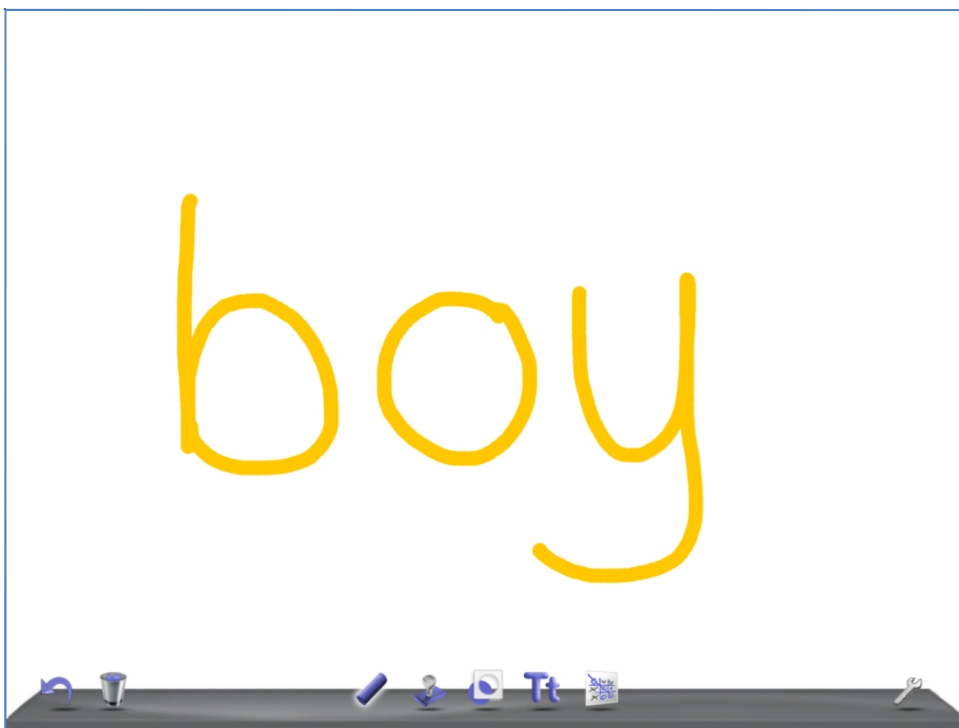
VISUALIZING WORDS

TRAIN: Visualization, visual recall.

DESCRIPTION:

1. Write a word on the iPad.
2. Ask your child to look at the word and count to 10 out loud.
3. **Minimise** the screen (Home Button) so the word disappears from view.
4. Tap their left shoulder and ask them what letter was at this end.
5. Now tap their right shoulder and ask them what letter was at this end.
6. If **CORRECT** ask them what letter was next to the one just called.
7. If **INCORRECT** let them look **AGAIN** while counting to 10 out loud.
 - Note: tap on the Doodle Buddy icon to make the word re-appear.
8. Repeat from step 3 again trying to spell the word backwards & forwards.
 - Note: having them spell the word backwards is critical in order to know they have developed a visual picture of the word in their mind.
 - They can never get it wrong....they just get more looks.
 - In time they will automatically visualize words (like any good speller).
 - Looking up is a sign they're trying to "picture" the word in their mind.

Help: This can be used for spelling bigger words later on (practice 3 words in 3 days. Ask your child to picture the word and to spell it when travelling in the car, before walking out the door or before going to bed etc).



was



said

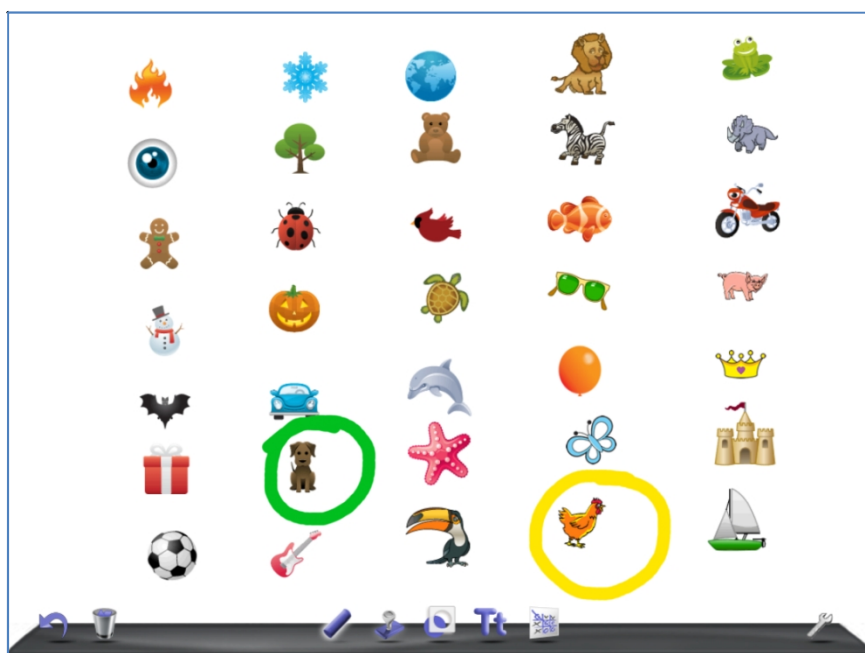
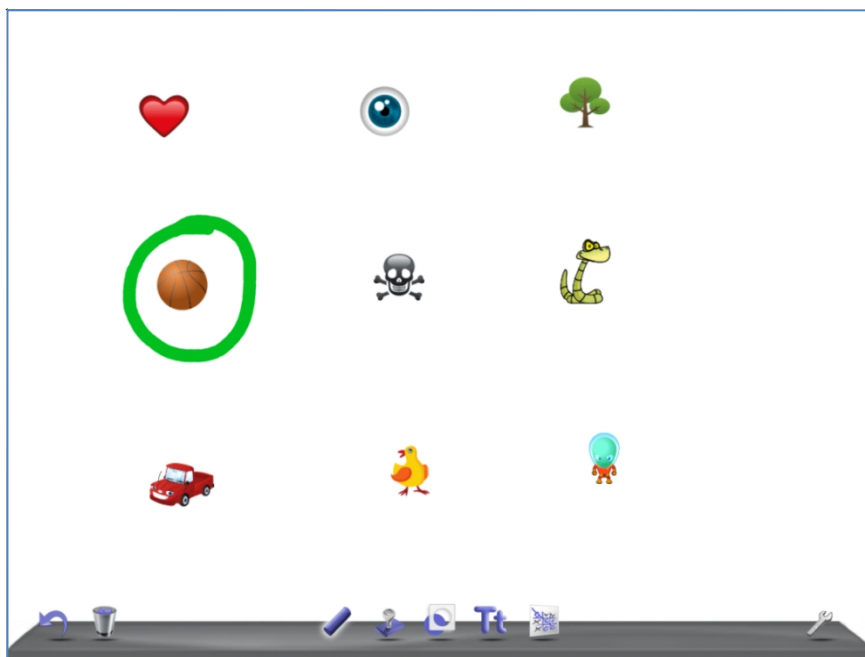


DOODLE MAP

TRAIN: Visual spatial awareness, directionality, following instructions.

DESCRIPTION:

1. Create a structured picture map like the ones shown below.
2. Instruct your child which direction is left and right.
3. Circle a picture and give them instructions that will lead them to another picture on the map (eg. up one, right two, down two).
4. Ask them to circle which picture they think your instructions led to.
5. Start simple and make it harder (bigger grid, more instructions) with practice.

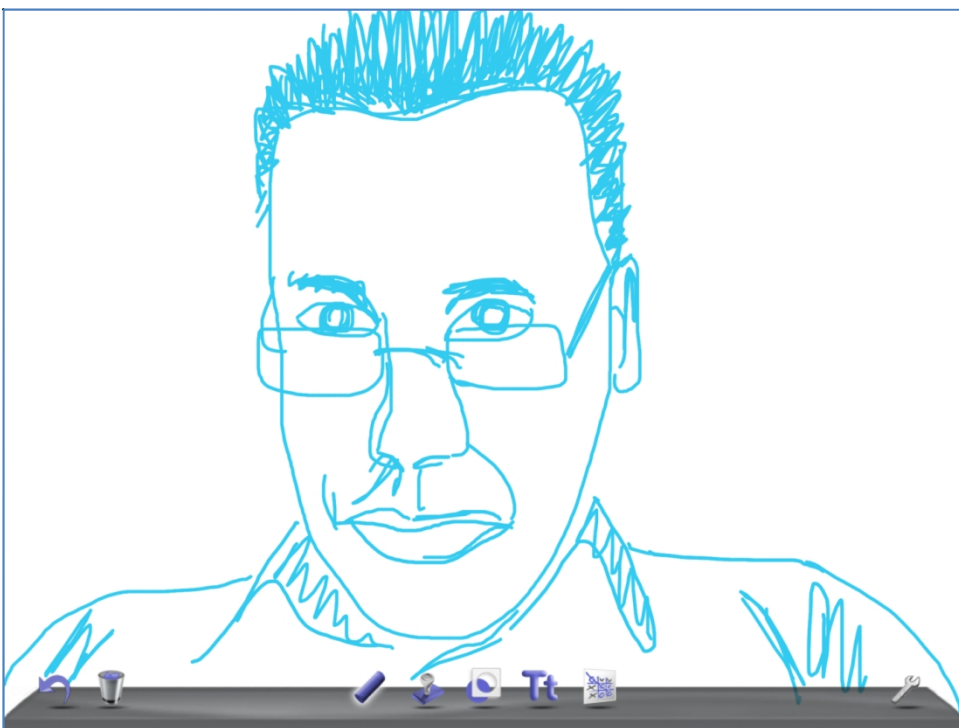
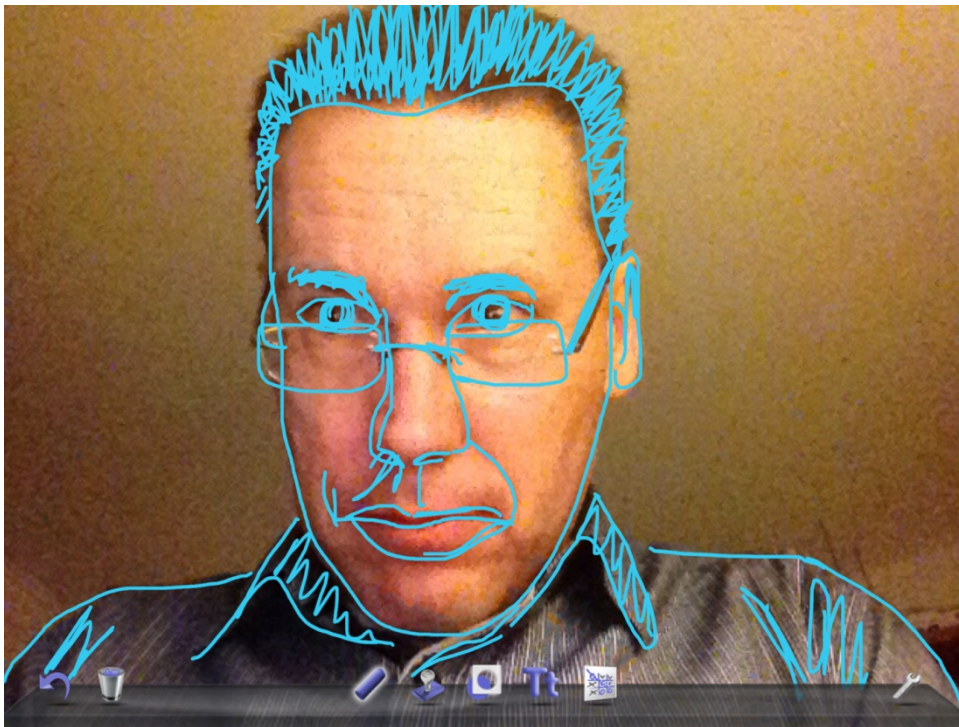


SELFIE

TRAIN: Visual analysis & motor skills.

DESCRIPTION:

1. Have your child take a picture of themselves (and friend, mum or dad, brothers or sisters) while looking at the iPad.
2. Now ask them to trace the picture with as much detail as possible.
3. When finished remove the background picture and check out the artwork!



LETTER TRACE

TRAIN: Visual motor, visual memory.

DESCRIPTION:

1. Draw a letter, upper case and lower case, for your child to trace.
2. If they can do this well, ask them to write it from memory without tracing.
3. Keep practicing until it looks neat. Try both upper and lower case.

