

# Writing with Alternative Pencils

## Make Your Own Position Coded Eye Gaze Frame

### Materials and Equipment Needed

- ~10 feet of narrow 1/2"-1" Schedule 40 PVC or CPVC pipe (from Home Depot or Lowe's)
- Get the corresponding size joints:
  - 4 ninety-degree elbow joints
  - 2 "T" joints
  - 2 end caps
- Hack saw or PVC pipe cutters
- Scissors
- Glue or Glue stick
- Laminate and laminator or contact paper
- Adhesive back hook and loop Velcro

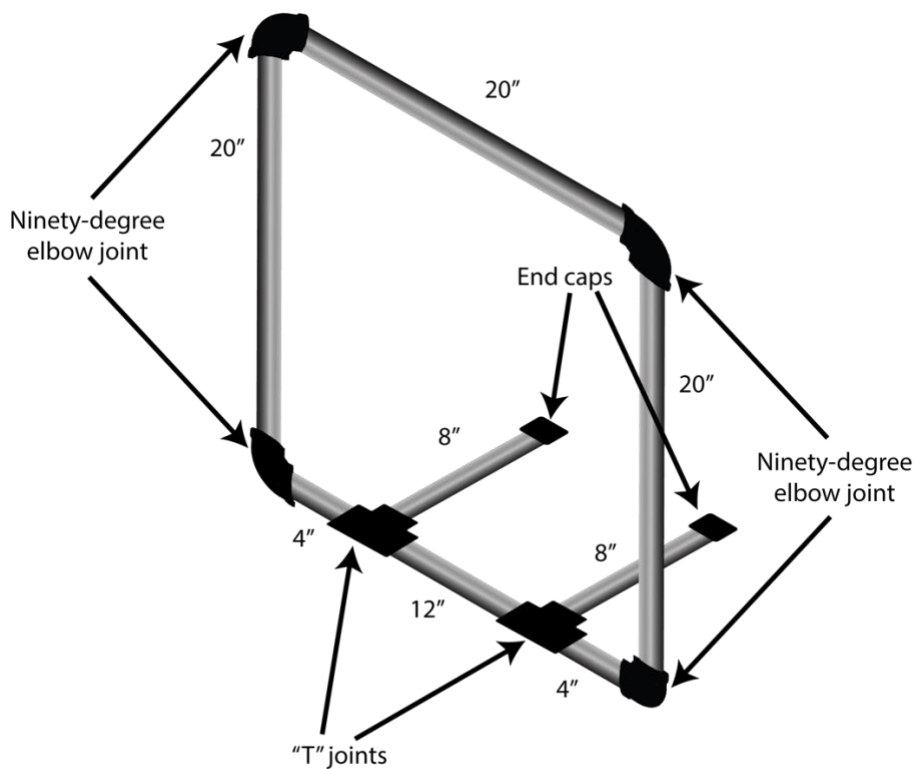
### Prepare the PVC Pipe

1. Cut pipe into following lengths:
  - 3 pieces-20" long (used for right, top and left sides of the frame) (used for the bottom of the frame)
  - 2 pieces-4" long (used for the bottom of the frame)
  - 1 piece-12" long (used for the bottom of the frame)
  - 2 pieces-8" long (used as legs to keep frame from tipping over)

### Assemble the PVC Eye Gaze Frame

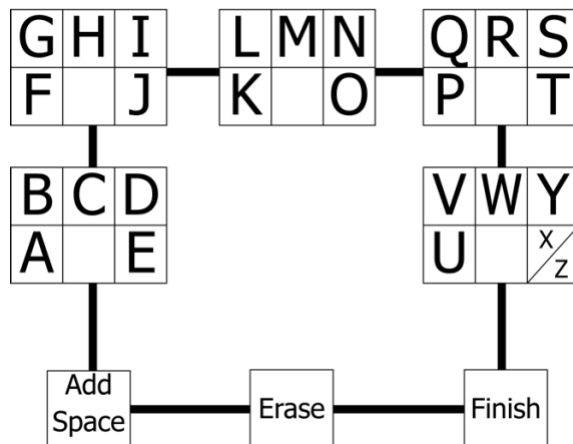
(An assembled frame is pictured below. Pipe is shown in gray & joints are shown in black.)

1. Connect the 3 20" long pieces with the ninety degree angles to create the right, top and left portions of frame.
2. Take the 12" long piece and attach a "T" joint to each end; then add a 4" long piece to each end.
3. Take above piece and connect it to the bottom of the eye gaze frame created in #1.
4. Insert the 8" pieces into the "T" joints.
5. Check for fit and glue. (Can leave bottom portion on unglued so that frame angle can fold.)



## Make the Letter Groups

1. Print letter groups.
2. Cut out groups, and glue the corresponding groups back to back. (Can add file folder or card stock between the two for extra stability.)
3. Individually laminate each letter group or seal with clear contact paper.
4. Add a piece of adhesive back hook Velcro onto each group; place it on the side that says: "This side faces the partner." Place corresponding adhesive back loop Velcro on frame.
5. Attach the groups to the PVC frame as pictured below. This is what the student will see.



D

C

B

E

A

*This side faces the partner.*

D

C

B

E

A

G

H

I

F

J

This side faces the partner.

I

H

G

J

F

L

M

N

K

O

This side faces the partner.

N

M

L

O

K

Q

R

S

P

T

This side faces the partner.

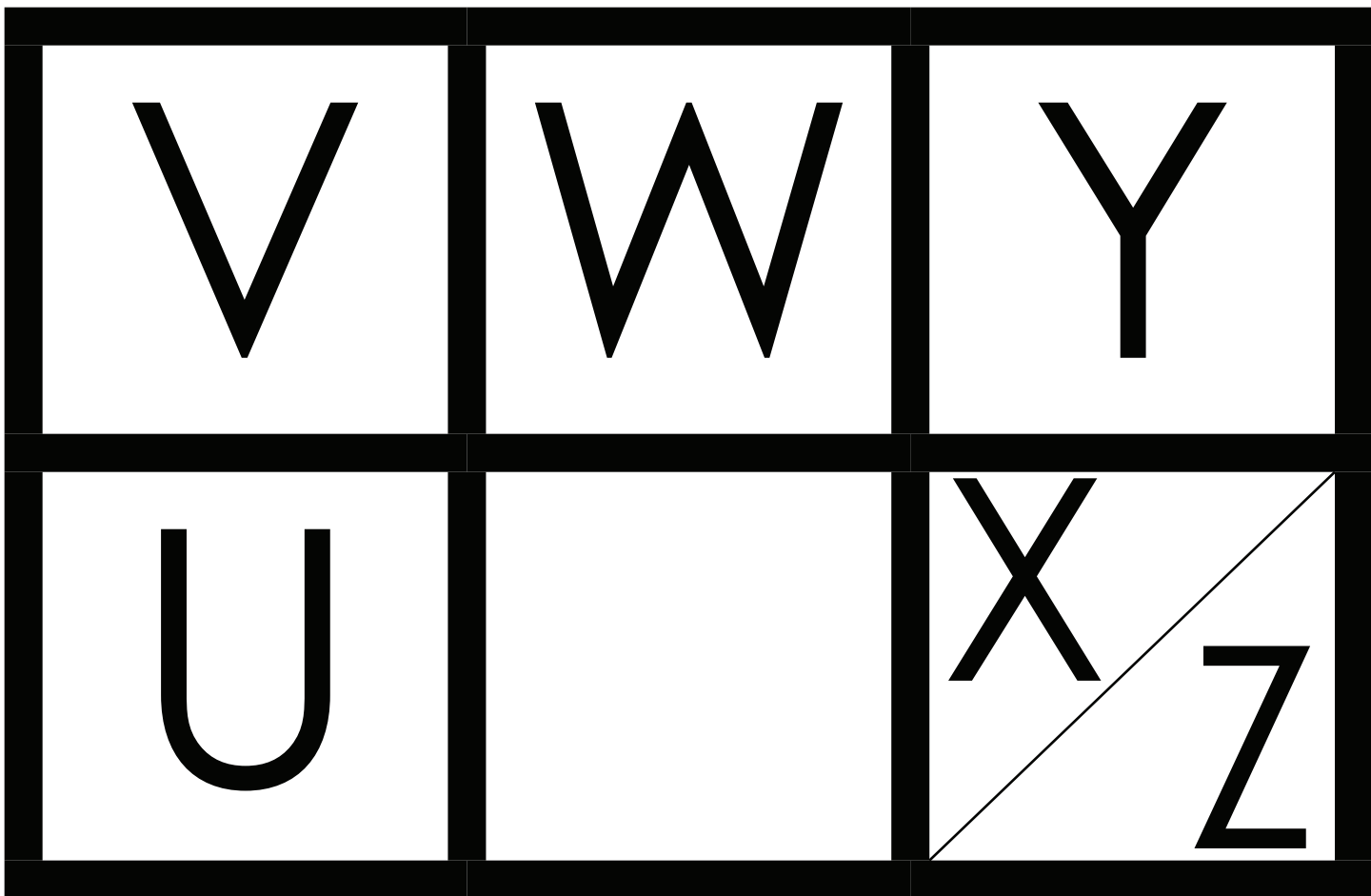
S

R

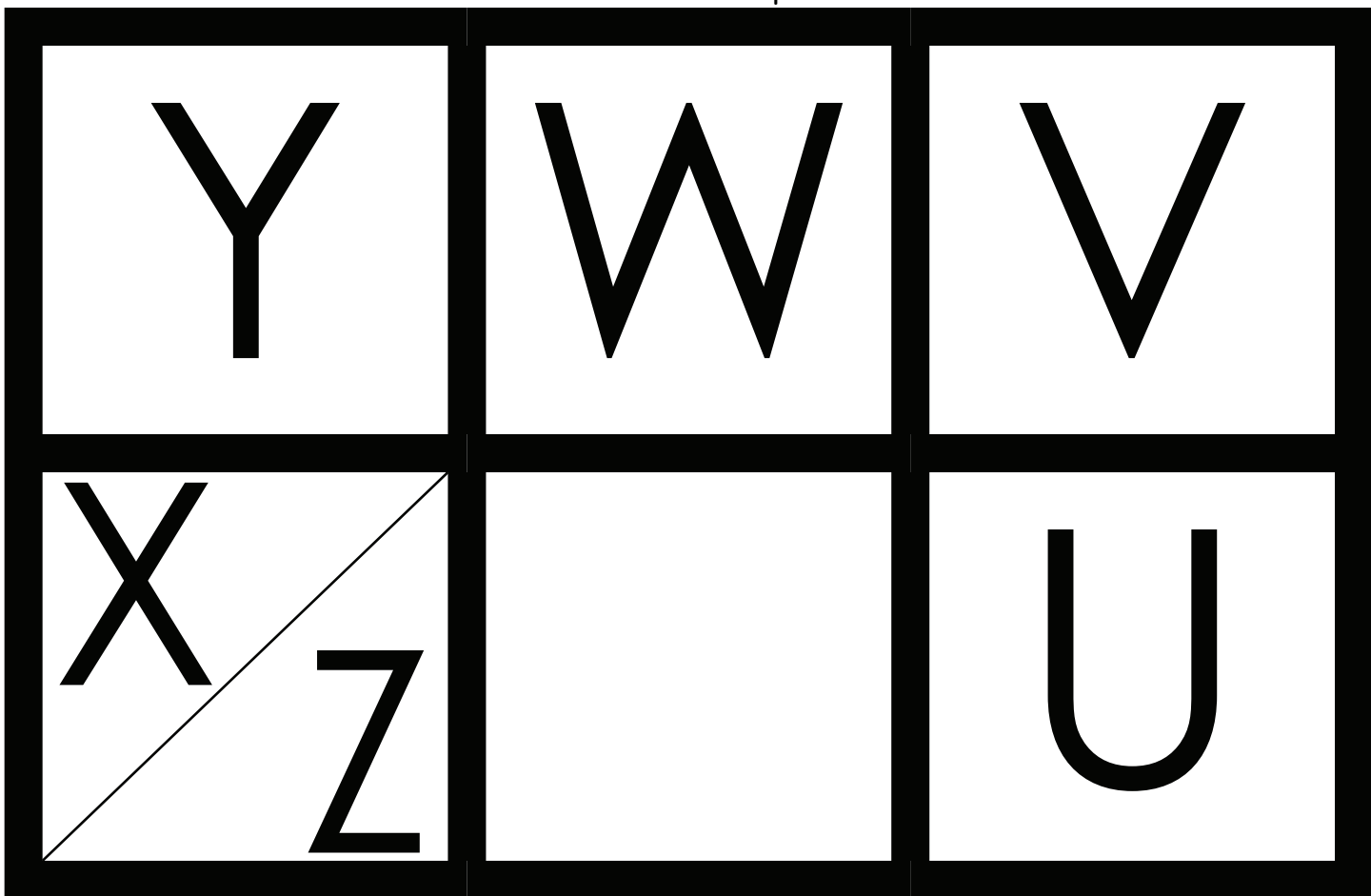
Q

T

P



This side faces the partner.





## Supplemental Symbols for the Eye Gaze Frame

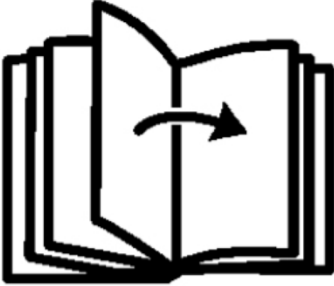




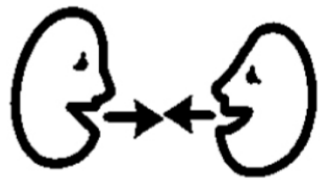
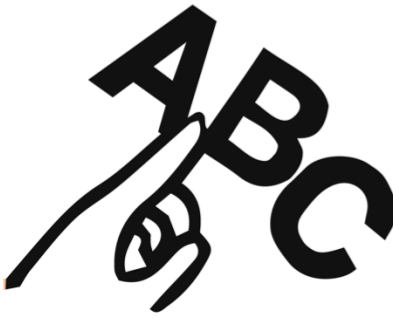

(Symbols from Boardmaker, [www.mayer-johnson.com](http://www.mayer-johnson.com))

### Make the Supplemental Symbols





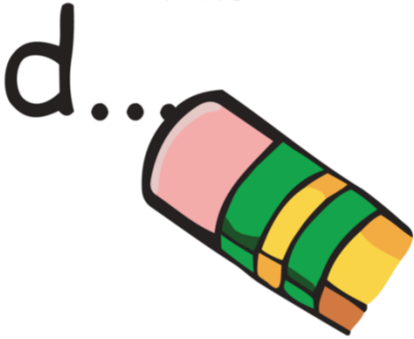
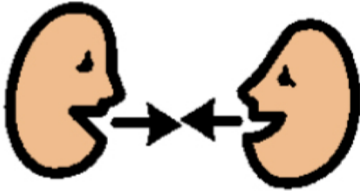
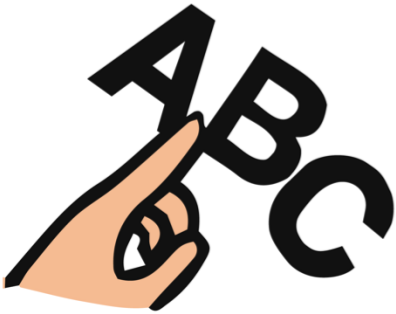

1. Print supplemental symbols.
2. Cut out symbols. Can glue onto file folder or card stock for extra stability.
3. Individually laminate each symbol or seal with clear contact paper. When cutting apart, be sure to leave a ~1/4" of laminate around the edge to prevent laminate from peeling apart.
4. Add a piece of adhesive back hook Velcro onto backside of symbols. Can position symbols "add a space," "erase," and "finished" onto the bottom right and left corners of frame. Place corresponding adhesive back loop Velcro on frame.
5. Individual symbols "let's talk about this," "erase," "go to letters," and "go to numbers" can be used on a choice board or other device. A variety of colored symbols have been included to support the types of symbols being used by the student(s).




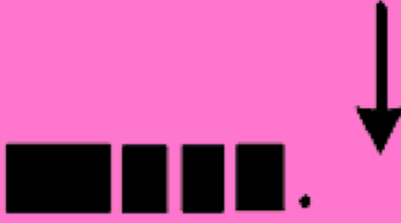


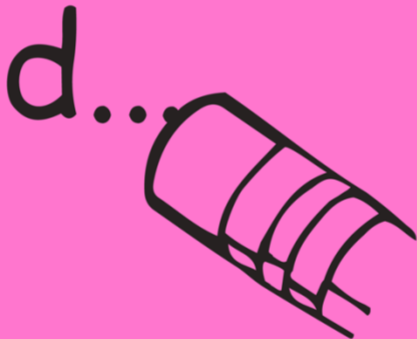
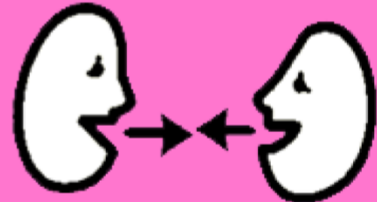
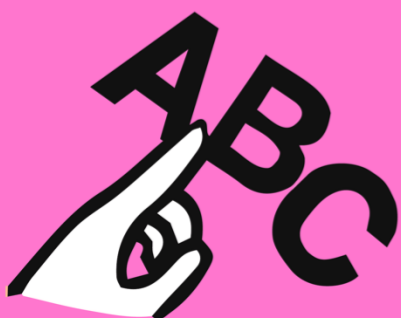




<p>turn the page</p> 	<p>add a space</p> 	<p>add a sign</p> 
<p>finished</p> 	<p>erase</p> 	<p>let's talk about it</p> 
<p>go to letters</p> 	<p>go to numbers</p> 	






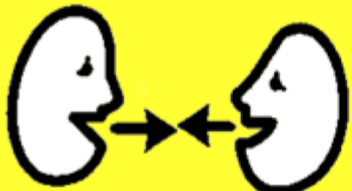
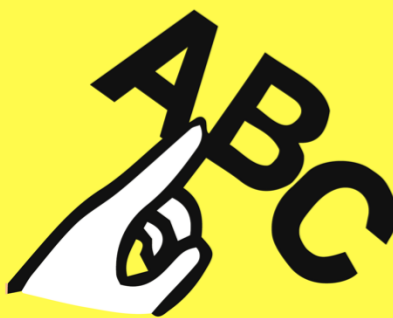


<p>turn the page</p> 	<p>add a space</p> 	<p>add a sign</p> 
<p>finished</p> 	<p>erase</p> 	<p>let's talk about it</p> 
<p>go to letters</p> 	<p>go to numbers</p> 	



<p>turn the page</p> 	<p>add a space</p> 	<p>add a sign</p> 
<p>finished</p> 	<p>erase</p> <p>d...</p> 	<p>let's talk about it</p> 
<p>go to letters</p> 	<p>go to numbers</p> 	



<p>turn the page</p> 	<p>add a space</p> 	<p>add a sign</p> 
<p>finished</p> 	<p>erase</p> <p>d...</p> 	<p>let's talk about it</p> 
<p>go to letters</p> 	<p>go to numbers</p> 