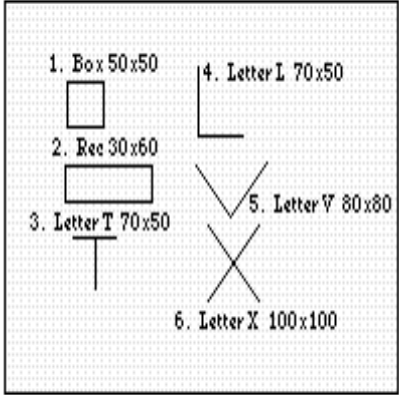


MicroWorlds Notes

Commands	Abbreviation	Descriptions	Examples
1. Forward	fd	Moves the turtle forward	fd 60
2. Back	bk	Moves the turtle back	bk 75.5
3. Right Left	rt lt	Turns the turtle—number afterwards tells the degrees to turn	<p>rt 180 or rt 90 or left 60</p>
4. setheading	seth	Changes direction	seth 90
5. pendown penup	pd pu	Turtle draws or leaves a trail	pd pu
6. setpensize	setpensize	Changes how wide or thick the line is drawn	setpensize 45 (1 is thin normal, 3 is larger, 45 would be a VERY wide line)
7. setcolor	setc	Changes turtle or other objects/trails color	setc 65 or setc blue (the colors are viewed in the Graphics section)
8. to	to	Begins or tells computer that a procedure is to follow... “get ready to follow some directions”	<pre>to step or to march</pre> <p>Example Solution:</p> <pre>To oct setc "green setpensize 4 Repeat 8[fd 45 rt 45] End</pre>
9. end	end	Ends a procedure (must be done after EACH procedure)	<pre>to march fd 50 end to step seth 180 end to box fd 50 rt 90 fd 50 rt 90</pre>

			fd 50 rt 90 fd 50 end
10. ctrl-F	ctrl-F	Flips page	ctrl-F
11. repeat	repeat	Repeats commands	repeat 4 [fd 50 rt 90] <ul style="list-style-type: none"> • Translates to repeat 4 X's 50 steps forward and the turn right 90 degrees If you set those steps to a "word" i.e., [fd 50 rt 90] = step then can repeat 4 [step] NOTE: the spaces and brackets must be exact
12. show position	show pos	Shows the turtles position on the screen	 <p>show pos</p>
13. setposition	setpos	Moves to the position on the screen	setpos [-240 40]
14. glide	glide	Moves the turtle (1 turtle) across the screen (animation)	Glide 100 5 (the 100 is the distance in mm and the 5 is the speed, w/1 being slow and 5 faster)
15. wait	wait	Slows down the animation (1 – 1/10 sec)	wait 10
16. setshape	setsh	Changes shape of turtle instantly	setsh 16 i.e., if you had made a shape of a boy and named it 16 the turtle would change into the image related to #16
17. freezebg	freezebg	Locks background colors and stamped objects	freezebg
18. unfreezebg	unfreezebg	Unlocks the background etc...	unfreezebg
19. t1, t2, t3,...	t1, t2, t3,...	"talking" to multiple turtles and/or turtle	t1, dog t2, cat t3

		objects	
20. launch []	launch []	Activates or launches multiple commands at the same time	Launch [t1, dog] or Repeat 100[pd seth 0 glide 50 1 pu seth 150 glide 50 1]
21. random #	random #	Generates a random number	fd random 4 this means move forward some steps between 0 and 3 fd random 100 means move forward some number of steps between 0 and 99
22. show mousepos	show mousepos	Tells exactly where the turtle is	show mousepos
23. savehtml	savehtml	Saves project as html to load and view on internet	savehtml

Examples:

To dog
 pu seth 270
 repeat 100 [setsh 16 fd 1 wait 1 setsh 17 fd 1 wait 1]
 end

To girlskater
 pu seth 90

repeat 100 [setsh 46 fd 2 wait 1 setsh 47 fd 2 wait 1 setsh 48 fd 2 wait 1]
 end

For the Dog ...
 Draw a background scene.
 Road, Mountains, sky,
 grass, flowers, trees, and at
 least one house.
 Page 2 ... Draw a multiple
 animation with 3 shapes in
 the animation.

Assignment #3

Square=360
 Triangle=360
 Pentagon=360
 Hexagon=360
 Octagon=360
 star=720
 Circle=Repeat once
 fd one time
 rt one time
 90,1,4

Extra Credit:
 A Smiley Face

