# Block Review Sheet!

**letter (1) of [world]**

Returns a particular letter in a word. In this case, would return "w". The 1 can be changed to any number to return a different letter.

**length of [world]**

Returns the length of a word.

**list [ ] ◀▶**

Creates a list

**item (1▾) of [■]**

Returns *item* 1 (in this case) of the list. The input where 1 is currently can be changed to any or last or a variable can be placed in the slot (this is really useful in for loops!)

**[ ] in front of [■]**

Puts whatever is in the first input spot at the front of the list

**all but first of [■]**

Returns a list with everything but the first item of the list

**length of [■]**

Returns the length of the list

**[■] contains [thing]**

Checks to see if the input ("thing" in this case) is in the list

**add [thing] to [■]**

Puts whatever is in the first input at the end of the list

**delete (1▾) of [■]**

Deletes an item from the list. In this case it will delete item 1, however you can change the 1 to last, any, or put a variable in this spot to select a different list index.

**empty? [■]**

Checks if a list is empty or not.

**insert [thing] at (1▾) of [■]**

Inserts whatever is in the first input ("thing" in this case) at a particular place in a list. Again, the 1 can be change to specify a different place to insert.

**replace item (1▾) of [■] with [thing]**

Replaces an item of the list with whatever is in the third input. The 1 can be changed to specify a different index in the list.

Performs a particular function (whatever function is in the gray oval) on each item in the list. Domain/Input = List. Range/Output = List of *same length* as input list. Needs at least one blank input in function!!





Checks if each item in the list satisfies the predicate in the gray hexagon. Domain/Input = List. Range/Output = List but not necessarily of same length as input (since you are only keeping items that satisfy the predicate, your list may be shorter or if all items satisfy the predicate, it may be the same length). Needs at least one blank input in predicate!!





Performs function on each item of the list, combining the output of the function at each step. Domain/Input = List. Range/Output = 1 thing!! This is often a number but it could be one word, true or false etc Needs two blank inputs in function!!