Name	
Period	

## **Worksheet – Insertion Sort**

You are using the Insertion Sort algorithm on the following array:

0	1	2	3	4	5	6	7	8	9	10		
3	26	18	1	27	10	3	46	5	2	5		
1)	Draw the array after the first pass:											
0	1	2	3	4	5	6	7	8	9	10		
2)	Draw the array after the second pass:											
0	1	2	3	4	5	6	7	8	9	10		
3)	Draw the array after the third pass:											
0	1	2	3	4	5	6	7	8	9	10		
4)	Draw the array after the fourth pass:											
0	1	2	3	4	5	6	7	8	9	10		
5)	Draw the array after the fifth pass:											
0	1	2	3	4	5	6	7	8	9	10		

6) In general, how many passes does selection sort take to **guarantee** that the correct value is in the first position?

7) What is the complexity of insertion sort?

8) After iteration n, what are we guaranteed?

9) What are we not guaranteed until the end of the last iteration?