

Advanced Fire Worksheet

Choose a topic to investigate regarding the Advanced Fire applet. You can choose from any of the listed topics, or come up with a topic of your own, with instructor approval:

- The relationship between burn probability and actual proportion of trees burned
- The relationship between burn probability and the number of iterations of burning
- The relationship between fire start location (center, edge corner) and proportion of trees burned
- The relationship between forest size and proportion of trees
- The relationship between forest size and burn iterations

1. What is your independent variable in this experiment? What is your dependent variable?

Independent Variable:

Dependent Variable:

2. What do you think the answer to your topic is, without doing any testing (hypothesis):

3. Come up with at least three different values for your independent variable that you can use to test your hypothesis

4. Carry out your trials on the applet. Be sure to try each value for your independent variable at least five times. As you work or when you are done, click on “Show Burn History” to see all of the results of your trials. Record these results in the following table:

Trial	Independent Variable Value	Dependent Variable Value
1		
2		
3		
4		
5		
Average		
6		
7		
8		
9		
10		
Average		
11		
12		
13		
14		
15		
Average		
16		
17		
18		
19		
20		
Average		
21		
22		
23		
24		
25		
Average		

5. Based on the results of your experiment, what do you think is the relationship between your independent variable and dependent variable?