

# DEFY THE ODDS



**PART 1:** Let your adventures begin! It's time to put your knowledge about monsters, logic, and skills to work as part of an adventuring party. Read the scenarios below about some unfavorable encounters with monsters. Calculate the odds and probability of each option. Then roll the d20 die and record your results!

1. Your party needs to cross a deep forest, but rumor has it that an owlbear lurks in those woods. Previous adventurers have successfully avoided the owlbear 5 times out of 20 tries. Based on these numbers, what are your party's odds of avoiding the owlbear? To figure it out, calculate the number of failures, and then write the number of successes compared to the number of failures as a simplified ratio.

$$\boxed{\phantom{00}} \text{ Successes } \div \boxed{\phantom{00}} \text{ Failures } = \boxed{\phantom{0000}}$$

2. Rather than try to avoid the owlbear, you could stun it with a bow and arrow. Fortunately, you have a ranger who is excellent at archery in your party, but shooting through the trees will be difficult. Your ranger must roll a 10 or higher to succeed. What is the probability that the ranger will roll a 10 or higher using a d20 die? To calculate the probability, divide the number of favorable outcomes by the number of possible outcomes. The number can be written as a decimal or percentage. What is the probability of success?

$$\boxed{\phantom{00}} \text{ Successful Outcomes } \div \boxed{\phantom{00}} \text{ Total Outcomes } = \boxed{\phantom{0000}}$$

3. Your team decides to take its chances that you will avoid the owlbear. You must roll a d20 to see how you fare. You need to roll a 16 or higher. What do you roll?

If you roll a 16 or higher, go on to question 4.

If not, you must rely on your ranger, and roll a 10 or higher with a d20. What do you roll?

Does your ranger succeed? If so, move on to question 4.

If not, how will you get past the owlbear? (Hint: Review its weaknesses to figure out a way past it.)

4. Your party makes it through the forest and arrives at an ancient ruin where there is a mysterious chest guarded by a gelatinous cube. There is only a narrow entrance into the chamber where the chest is kept, so you must decide whether to fight the gelatinous cube or lure it away from the entrance. Calculate the probability of success for each option. According to its stats, the cube has great strength, so the target for a successful battle is 10 or higher. But the monster's stat for Intelligence is low, so you'll be able to lure it away or distract it with a roll of 5 or higher.

Strength/fight probability: \_\_\_\_\_

Intelligence/lure away/distraction probability: \_\_\_\_\_

Now, roll the dice! Was your party able to obtain the chest? \_\_\_\_\_