**THE LIVES OF STAPH Actions List**

**Each time you roll the dice, follow the actions that correspond to the numbers you roll.**

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| **DICE ROLL** | **Action** |
| **1 and 1** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Draw spikes** around your bacterium’s capsule. These spikes protect your bacteria. **Move your population tracker up one level.** |
| **2 and 1** | Your host environment is stable with plenty of resources. Your current population increases. **Move your population tracker up a level**. |
| **2 and 2** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Trace the** **dotted line** around your bacterium’s capsule. These **hardened capsules** will protect your bacterium. **Move your population tracker up one level.** |
| **3 and 1** | Your host environment is stable with just enough resources to support your current population size. Your population’s reproductive rate and death rate are equal. You inherited a random mutation that doesn’t affect you. **Remain at your current population level.** |
| **3 and 2** | Your host environment is stable with just enough resources to support your current population size. You inherited a random mutation that doesn’t affect you. Your population’s reproductive rate and death rate are equal. **Move your population tracker up one level.** |
| **3 and 3** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Draw diagonal lines** over your bacterium’s body. These transport proteins take in antibiotics to speedily force them out of the bacterium. **Move your population tracker up one level.** |
| **4 and 1** | Your host is a moderately healthy individual who takes the full prescription of antibiotics. Your environment is unstable. Your current population decreases. **Move your population tracker down to the lowest level**. **(Move back only ONE space if you have spikes AND enzyme secretions)** |
| **4 and 2** | Your host does not seek medical attention. Your environment is stable with plenty of resources. Your current population increases. **Move your population tracker up two levels.** **(If you have 3 or more adaptations, move your population tracker up to the highest level).** |
| **4 and 3** | Your host environment is stable with just enough resources to support your current population size. Your population’s reproductive rate and death rate are equal. You inherited a random mutation that doesn’t affect you. **Remain at your current population level.** |
| **4 and 4** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Draw squiggly hair-like lines** around your bacterium’s capsule. These **cilia** will help your bacteria absorb materials outside of it. **Move your population tracker up one level.** |
| **5 and 1** | Your host environment is stable with just enough resources to support your current population size. You inherited a random mutation that doesn’t affect you. Your population’s reproductive rate and death rate are equal. **Remain at your current population level.** |
| **5 and 2** | Your host is a healthy individual who takes the full prescription of antibiotics. Your environment is unstable. Your current population decreases. **Move your population tracker to the lowest possible level regardless of current status.** |
| **5 and 3** | Your host environment is stable with just enough resources to support your current population size. Your population’s reproductive rate and death rate are equal. You inherited a random mutation that doesn’t affect you. **Remain at your current population level.** |
| **5 and 4** | Your host takes the full prescription of antibiotics. Your environment is unstable. Your current population decreases. **Move your population tracker down to the lowest level**. |
| **5 and 5** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Draw little black dots** on the surface of your bacterium. These **pores** secrete enzymes that break down the capsules of foreign bacteria. **Move your population tracker up one level.** |
| **6 and 1** | Your host stops taking their prescription of antibiotics once they feel better instead of for the full ten days. Your current population increases. **Move your population tracker up two levels**. |
| **6 and 2** | Your host environment is stable with just enough resources to support your current population size. You inherited a random mutation that doesn’t affect you. **Move your population tracker up one level.** |
| **6 and 3** | Your host takes the full prescription of antibiotics. Your environment is unstable. Your current population decreases. **Move your population tracker down to the lowest level**. **(Move back only ONE space if you have hardened capsule AND oily film secretions).** |
| **6 and 4** | Your host environment is stable with just enough resources to support your current population size. Your population’s reproductive rate and death rate are equal. You inherited a random mutation that doesn’t affect you. **Remain at your current population level.** |
| **6 and 5** | Your host stops taking their prescription of antibiotics once they feel better instead of for the full ten days. Your current population increases. **Move your population tracker up a level**. **(Move population tracker up TWO levels if you have diagonal lines).** |
| **6 and 6** | An individual in your population just inherited a random mutation that resulted in an ADAPTATION. This mutation has been passed on to newly produced individuals in your population. **Lightly shade** around your bacterium’s capsule. This **secretion** **of** **oily film** resists water absorption and helps with antibiotic resistance. **Move your population tracker up one level.** |

If you get sent to **POPULATION LEVEL** **ONE** two turns in a row, you must cross out your current bacterial population; your round is over until the next game.

Players who have a population that survives to the end of a round win that round. **The winner(s) of a game survive the most rounds.**