That's the way the cookie crumbles

A bakery is producing cookies for a fundraising drive. The cookies come in packs of 5.

A fault in the design of the machinery means that one in every ten cookies crumbles when packed.

1. Model this process to work out an experimental probability of getting exactly two crumbled cookies in a pack.

2. Compare your experimental probability with the theoretical probability of getting two crumbled cookies in a pack.