- **Q1 (1 pt.):** Who are the members of your group?

  Kaitlyn Valentinetti

- **Q2 (1 pt.):** How many red acorns are in your bag?

  2 acorns in my bag are red.

- **Q3 (2 pts.):** What is the probability that you reach into the bag, randomly select an acorn, and it is red? You don't need to give an exact number, but be sure to explain your reasoning.

  There is a 40% probability that if I randomly pull an acorn out of the bag that it will be red because there are 2 red acorns and 3 acorns with no ink, so the chance is greater to pull an acorn with no ink than a red acorn.

- **Q4 (2 pts.):** What is the probability that you reach into the bag, randomly grab two acorns, and they are both red? Don't try to give an exact number, but rather explain why this might be higher or lower than your answer to the previous question.

  The probability that you reach into the bag and randomly grab two acorns, and both are red, is lower than if you only select one acorn, and it is red, because there are more combinations to consider when more than one acorn is pulled. If you pull one acorn, there's only a chance it is red or not, but if you pull two acorns there is a chance both are red, one is red and one is not, or both are not red. Therefore, the outcomes increase and the probability of each event decreases.

- **Q5 (2 pts.):** Keeping in mind your your answer to 2, what is the probability that you grab all 5 acorns at once and find **two red** acorns? Explain your reasoning.

  There's a 100% probability that you will find two red acorns if you pull out all five of the acorns because 2 red acorns are present in the bag.

- **Q6 (2 pts.):** Keeping in mind your your answer to 2, what is the probability that you grab all 5 acorns at once and find **three red** acorns? Explain your reasoning.

  There is 0% probability that you would find three red acorns because only two red acorns exist in the bag.