



**Lesson 1: Heads or Tails?**

How should people go about making important decisions? Should they let chance make their choices in life or are there other methods to determine the best route to take in formulating answers to tough decisions?

**Doing the Science**

1. Imagine that you have to make a difficult decision. For instance, pretend that you must decide at this instant on which career path you'll take when you finish your schooling. However, you only have two options available at this time – a skydiving instructor or a deep-sea diver who welds underwater structures.
2. Some people believe that chance governs what happens in their lives, and they make many decisions based on this principle. For now, you will apply this approach to make your career choice. You will flip a coin to determine your life's path. If you flip heads, you're a skydiving instructor. If it's tails, you're off to the deep blue sea to be an underwater welder. Flip a coin three times and record your data in Table 1 by circling each flip's result. Based on the best two out of three, record what career was chosen for you.

**Table 1.**

| Career               | Flip #1 Results | Flip #2 Results | Flip #3 Results | Your Career |
|----------------------|-----------------|-----------------|-----------------|-------------|
| Skydiving Instructor | Heads           | Heads           | Heads           |             |
| Deep Sea Diver       | Tails           | Tails           | Tails           |             |

**Do You Understand?**

1. Was the career choice what you wanted? Discuss how you felt about using the coin-flip method to make a career choice.
  
2. Explain why the coin-flip method is (or is not) a good way to make important life decisions.
  
3. Propose and discuss another method that you could have used to help make the decision as to which career you should choose. Explain how this method would have been better (or worse) than the coin-flip method.