**Session 2 Questions**

1. **You toss a coin 10 times, and it lands on Heads each time. What do you think the chance is that another head will come up on the next toss? 0.5, less than 0.5 or more than 0.5**

Chance would remain same that is 0.5. This is because tossing of coin is an independent event.

**2- You tossed a coin and you got head. What is a head here?**

* **Event**
* **Set**
* **Sample space**
* **Subset**

1. **What will be the intersection of A: 1, 2, 4, 5, 9, 10 and B: 1, 5, 3, 6, 8, 10**

1,5,10

1. **What will be the union of A: 1, 2, 4, 5, 9, 10 and B: 1, 5, 3, 6, 8, 10**

1,2,3,4,5,6,8,9,10

1. **A couple has two kids, what is the sample space for the gender of these kids? For simplicity assume that gender can only be male or female.**

{MM,MF,FM,FF}

**6. If every element of a set A is also an element of another set B, we say that:**

* **A is a subset of B**
* **B is a subset of A**
* **A union B**
* **A is not a subset of B**

**7. What is an empty set?**

An empty set doesn’t have any elements. It’s size is 0.

**8. A set contains 1, 2, 3. Which is the correct presentation of a set?**

* **(1, 2, 3)**
* **{1, 2, 3}**
* **[1, 2, 3]**
* **None of them**