# Discussion Week 6

## Discussion Questions

▽ **Mining Pools: What are the differences between a pay-per-share and proportional payout scheme? Are proportional mining pools feasible in practice? Why or why not? Can you think of any other mining pool strategies to increase your mining profit?**

▽ **Double Spend Attack: How could Alice double spend on Bob?**

▽ **Selfish Mining: Is selfish mining always optimal? Can we improve upon this strategy?**

▽ **Confirmations: What purpose do they serve? As a coffee shop owner, is it necessary to wait for 6 confirmations before giving someone their coffee? What kinds of goods would require confirmations to be important?**

## Group Activity

▽ **Get started on your homework! Form groups and brainstorm a few ideas on how to attack Bitcoin as a malicious actor. Discuss how your idea works or doesn't work. What goal does this attack achieve? How does it achieve that goal?**
**Optional/Bonus: What are some defenses that can be put in place to prevent your attack?**