**Sample Worksheet tying offers to the concept of discount rates**

1. Before you turn in your offer sheet the Entrepreneurship project presentation dates, record your responses here. (If you are in a combined discussion group, pick the lowest offer set.)

|  |  |
| --- | --- |
| **Order/Date** | **Bonus points your group would want as an incentive to present on the listed week instead of the last week** |
| Week 1 - 11/16 |  |
| Week 2 - 11/23 |  |
| Week 3 - 11/30 |  |
| Week 4 - 12/7 | **0** |

2. Based on your responses above, complete the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Order | Offer of bonus | Total points possible (add 110) | Week total as a % of the maximum listed | 100% - Week % = (discount amount) |
| Week 1 |  |  |  |  |
| Week 2 |  |  |  |  |
| Week 3 |  |  |  |  |
| Week 4 | **0** | **110** |  |  |

3. Briefly summarize why you made the offers that you did across the different weeks:

4. What does this table show about the difference in the effort (opportunity cost) of preparing to present first compared to the second week? Or the third week? Or the last week?

5. Look at the last column of the second table. How much of a discount is your group applying to the future effort of preparing to present the last week compared to the effort of preparing to present the first week? What would be another example of a discount rate applied to future costs?

(Continued on reverse)

6. Now consider the present value of future benefits. If a large, well-respected company promised to give you or your heirs the following sums of money at the future dates listed, come to an agreement in your group about how much would you be willing to give them today? Be honest! Complete all of the columns of the table as indicated:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Future Amount | When | What $ you would pay today | Today as a % of the Future | Discount = 100% - Today % |
| $50 | One year from today |  |  |  |
| $50 | 2 years from today |  |  |  |
| $50 | 5 years from today |  |  |  |
| $50 | 10 years from today |  |  |  |
| $50 | 50 years from today |  |  |  |

7. Briefly explain your choice of the numbers you entered for what you would pay today for the different time periods.

8. Why is your discount rate important when we think about future costs and benefits?

9. Lots of climate change research says that the actions we take today will produce most of their benefits 50 years from now because of the long time it takes to see changes on a global scale. Based on your group’s discount rate from the table above, if you knew you could get $50 million in benefits 50 years from now, what would be the corresponding amount that you would be willing to pay today?

10. Why is that cross-time comparison important and what does it show about the challenges of convincing people to give up money today for future environmental benefits?

11. Often, climate change mitigation plans commit to modest changes today and promise bigger changes several years from now. How does that pattern connect to the discount of future effort that you investigated at the beginning of this exercise?