$\qquad$
How many questions have I asked you? How pieces of data have I asked of you already? $\qquad$
How many of those questions or pieces of data did you answer/supply? $\qquad$
If you did not answer all the questions or give me all the data I asked for, then ask me or a classmate what I am talking about?

In less than twenty words, give a reason for or against answering those questions

| I should answer these questions because...... | I should not have to answer these questions because....... |
| :--- | :--- |

Mathematics is a lot about paying attention to and being aware of little details that many impact a scenario later. Not following directions will be a problem in this class, if you need clarification, then ask me, or a classmate. NOW get the dividers up and answer these questions HONESTLY! Task 1: On your own, list things you like about working in a group

Task 2: On your own, list things you dislike about working in a group

Task 3: On your own, suggest a group rule or two

Task 4: On your own, suggest on how groups should be formed for optimal effectiveness

Task 5: As a group report your findings and complete the related group findings sheet, all members must get a set of initials by their name from either the Includer or the Organizer to get credit for this assignment (SEE OTHER SHEET)

For this activity and so we can get on with the discussions, I have allowed the forces of random to pick your group

| Organizer <br> (ACE) | Resourcer <br> (4) | Understander <br> (2) | (8) |
| :---: | :---: | :---: | :---: |
|  |  |  |  |

Given that I have selected to use only these four playing cards, answer the following questions:

1. What is the probability of drawing a card with a value higher than 3 from these cards? Express answer in at least two of the following forms? Fraction/Decimal/Percentage
2. Was this question a fair question? BRIEFLY Explain why you think it is fair or is not fair
3. Circle the probability you chose? $0 \% \quad 25 \% \quad 50 \% \quad 75 \% \quad 100 \%$
$\qquad$
In less than twenty words, give a reason for or against writing your name and hour at the top of the page on everything you turn in to me.

| I should write my name and hour on all my papers <br> because..... | I should NOT write my name and hour on all my papers <br> because........... |
| :--- | :--- |
| What is the benefit for you and your teacher? | What is the benefit for you and your teacher? |

Fine Print: It annoys me to try and figure out who has turned in materials and when I am annoyed for failing to follow basic directions, I typically reduce the awarded points for the transgression/omission/willful passive aggressiveness!

| Task 1: List things you like about working in a group <br> Responses From Group | Task 2: List things you dislike about working in a group <br> Responses From Group |
| :--- | :--- |
|  |  |
| Task 3: Suggested Group Rules <br> Responses From Group | Task 4: Suggestions on how groups should be formed for <br> optimal effectiveness <br> Responses from the Group |

Initials of Completion by all members Group Membership (Organizer or Includer must initial for each group member)

| Organizer | Resourcer | Understander | Includer |
| :--- | :--- | :--- | :--- |

Discuss these roles in your group
To be clear, ALL STUDENTS will participate in a role (or multiple roles) in class on a REGULAR/DAILY basis!
To be clear, ALL STUDENTS will participate in the mathematics problems in class on a REGULAR/DAILY basis!
I will ask groups to discuss with me individually, within their group, \& as a member of the group of people with the same roles.

| $\bigcirc$ | Organizer <br> Keeps the group together and focused on problem Makes sure no one is talking to people outside of the group |  | Resourcer |  | Understander |  | Includer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\bigcirc$ | Gets missing materials at the beginning of activity | $\bigcirc$ | Makes sures that all ideas are explained so everyone is | - | Makes sure everyone's ideas are listened to |
| $\bigcirc$ |  | 0 | This person is the "driver" of technology | $\bigcirc$ | happy with the explanation If you do not understand, ask the person whoever had the | - | Invites other people to make suggestions |
|  |  | 0 | This person makes sure all members are ready prior to calling for teacher to discuss or review results | $\bigcirc$ | idea.. if you do, makes sure everyone else does too Make sure the important parts of get written down |  |  |


| Organizer <br> (Add your comments) |  | Resourcer (Add your comments) |  |
| :---: | :---: | :---: | :---: |
| Make sure that the organizer $\qquad$ | Make sure that the organizer DOES NOT | Make sure that the resourcer $\qquad$ | Make sure that the resourcer DOES NOT |
| Understander <br> (Add your comments) |  | Includer(Add your comments) |  |
| Make sure that the understander | Make sure that the understander DOES NOT | Make sure that the includer $\qquad$ | Make sure that the includer DOES NOT $\qquad$ |

$\qquad$

- Group needs to clearly establish the HOW of rock/paper/scissors will carried out
- Best of three
- Participants need only play
- NON participant roles
- If four people in group, then one person is REFEREE, the other person records the results in the table below
- if three people in group, then REFEREE/RECORDER done by same person

Round 1: Organizer versus Includer (if only three people in group, then BYE for this round)

| Organizer |  |  | Winner |  |  |  | Includer |  |
| :---: | :---: | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Organizer | TIE | Includer | Rock | Paper | Scissors |

If still tied after 10 attempts, then (REFEREE scrambles cards) draw from the four cards, ACE, 2,4 , and 8 first to draw the ACE is winner.

The person that won the first trial of Rock/Paper/Scissors gets first draw!
$\qquad$ Won in $\qquad$ Games

Round 2: Resourcer versus Understander

| Resourcer |  |  | Winner |  |  | Understander |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |
| Rock | Paper | Scissors | Resourcer | TIE | Understander | Rock | Paper | Scissors |

If still tied after 10 attempts, then draw from the four cards, ACE, 2,4 , and 8 first to draw the ACE is winner.
The person that won the first trial of Rock/Paper/Scissors gets first draw!
$\qquad$ Games

Round 3: Two Winners battle

| Winner |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |
| Rock | Paper | Scissors | TIE | Rock | Paper | Scissors |

If still tied after 10 attempts, then draw from the four cards, $A C E, 2,4$, and 8 first to draw the ACE is winner.
The person that won the first trial of Rock/Paper/Scissors gets first draw!
$\qquad$ Won in $\qquad$ Games Congratulations you are your tables champion!

All table champions are entered into EVEN/ODD playoffs (we will do this another day)
Math of the activity

1. As a group, attempt to determine the probability of winning one trial of ROCK/PAPER/SCISSORS
2. Your grade on this activity will be based on the quality and clarity of your support for your answer and not necessarily the accuracy of the answer!
a. Hint: A picture/diagram or a list of the sample space may help
b. If you want to use abbreviations: $R=$ Rock $P=$ Paper $S=$ Scissors $W=$ Win $L=$ Lose $D=$ Draw
3. Is Rock/Paper/Scissors a fair game? Explain your answer
