Worksheet I: Permutations and combinations sorting activity

**In your group:**

* **Cut out the cards.**
* **Sort the cards into two piles: Permutations and Combinations**
* **At the end of the activity, you will be asked to share your findings and compile a master list with the rest of the class.**

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| The number of 5-character passwords that can be made from a list of 10 different characters. |  | The number of ways a captain and vice-captain can be chosen from a squad of 12 sportsmen. |
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| The number of hands of 7 randomly- chosen cards that can be dealt to one player in a card game. |  | The number of ways a committee of  3 senior and 3 junior students can be selected from a group of 10 senior and 8 junior students. |
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| The number of teams of 3 people that can be selected from a group of 12 people. |  | The number of ways 5 out of 7 paintings can be arranged in a line on a wall. |
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| The number of ways 2 boys and 1 girl can be chosen from a group of 5 boys and 6 girls. |  | 5 comedians are chosen from a list of 12 to star in a show. The names of the comedians are written on a list. How many different possible lists are there? |
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| The number of ways 3 of the 8 runners in a race can finish 1st, 2nd and 3rd. |  | A selection of 3 letters from the word PEARL is made. How many different selections are possible? |