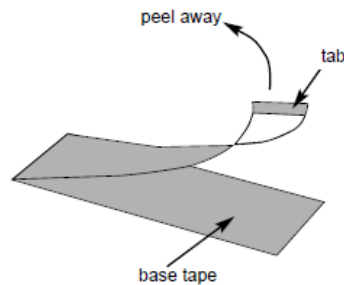


Magic Tape

Part A

- Using a scrap sheet of paper, tear out about 20 bits of paper
 - Each should be about the size of the end of a pencil or smaller.
- Take a 30cm length of tape (clear scotch type tape)
- Place tape on clean part of table and press hard to remove as many bubbles as possible
 - This is called the **base tape** and never is taken off the table
- Take a second length of tape about 10cm long
 - Fold over the last centimeter of tape to make a tab
- Stick the second tape on the base tape
 - Press hard to remove as many bubbles as possible
- Lifting the tab, quickly pull the top tape off the base tape



- Holding the tape straight with sticky side up, bring the tape near the paper bits
- Write down what you observe.

- What can you conclude about the tape?

Part B

10. Make another 10-cm strip of tape with a tab (like the other one)

11. Using a pen label one 10-cm strip **1** (top) and the other one **2** (bottom)

12. Place **2** on the base tape

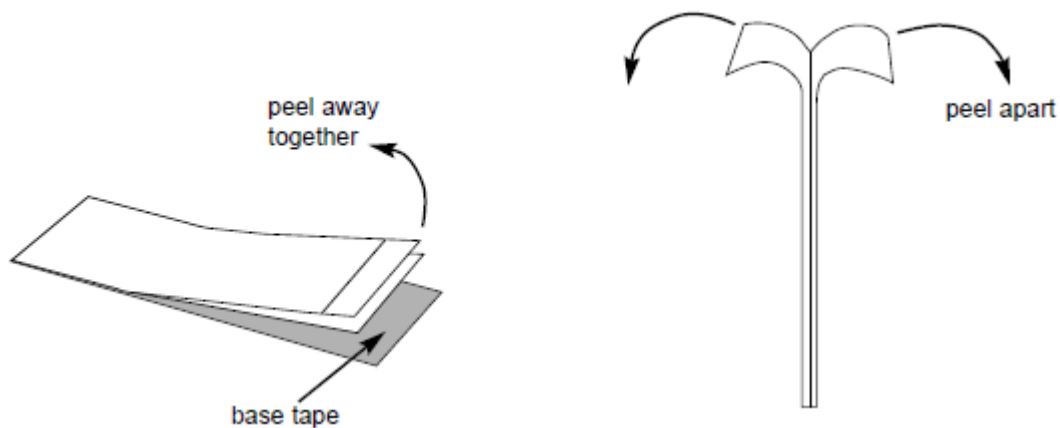
a. Press hard

13. Place **1** on **2**

a. Press hard

14. Hold onto both tabs together quickly rip them off together

15. Hold onto each tab individually and quickly rip them apart



16. What do you observe when you hold **1** & **2** close together?

17. What is causing the interaction between **1** & **2**?

Part C

18. Place 1 & 2 on the edge of the table

a. Be sure that most of the tape hangs freely

19. Make a second **1 & 2** pair

20. Place on base pair and rip apart as in parts #13 - #15

21. Bring each possible pair together.

22. Record each your observations of each interaction below

1 & 1	1 & 2	2 & 2	2 & 1

23. How many kinds of “charge” can you identify? (Name each of them)

24. Make a simple rule for the interactions of the charges

25. Now bring each tape (1 & 2) near the paper bits. Record your observations?

26. What kind of charge must the paper have?