



# Magnetic black box answer sheet<sup>1</sup>



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| Graph of   |          | VS      |             |              |  |
|------------|----------|---------|-------------|--------------|--|
| lope of th | e graph: | magneti | Intercept o | f the graph: |  |





### **B.1** (0.3 pt)

| Section   | Section number |
|-----------|----------------|
| Aluminium |                |
| Copper    |                |
| Wood      |                |

| B.2 (2.6 pt)<br>Terminal velocity | oft  | the  | ma  | agr | net | in | the | e Al | um | nini | um | ı se | ecti | on | of | the | e pi | pe: |       |  |  |  |
|-----------------------------------|------|------|-----|-----|-----|----|-----|------|----|------|----|------|------|----|----|-----|------|-----|-------|--|--|--|
| Canvas grid to drav               | v tł | ne s | etu | ıpι | ise | d: |     |      |    |      |    |      |      |    |    |     |      |     |       |  |  |  |
|                                   |      |      |     |     |     |    |     |      |    |      |    |      |      |    |    |     |      |     |       |  |  |  |
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|                                   |      |      |     |     |     |    |     |      |    |      |    |      |      |    |    |     |      |     |       |  |  |  |





#### B.2 (cont.)

**Terminal velocity of the magnet in the Aluminium section of the pipe:** Fill the appropriate quantities.

|              | · · · · · · · · · · · · · · · · · · · |               |                 |                    |   |  |
|--------------|---------------------------------------|---------------|-----------------|--------------------|---|--|
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|              |                                       | <u> </u>      |                 | <u> </u>           |   |  |
| Graph of     |                                       | vs            |                 |                    |   |  |
| Slope of the | e graph:                              |               | Intercept       | <br>t of the graph | : |  |
| Terminal ve  | elocity of the n                      | nagnet (in cm | /s) in Aluminiu | ım section:        |   |  |
| raph on pac  | ge number:-                           |               |                 |                    |   |  |
|              | -                                     |               |                 |                    |   |  |





| B.2 (cont.)<br>Length of the Aluminium section of the pipe: |                         |
|---|-------------------------|
| Mention only if used  |                         |
| Graph of vs   |                         |
| Slope of the graph:   | Intercept of the graph: |
|   |                         |
| Length of the Aluminium section (in cm):                    |                         |
| Graph(If any) on page number :-                             |                         |





# B.3 (2.2 pt)Terminal velocity of the magnet in Copper section of the pipe: Fill the appropriate quantities.

|                             |                             |               |                             | *                          |    |  |
|-----------------------------|-----------------------------|---------------|-----------------------------|----------------------------|----|--|
|                             |                             |               |                             |                            |    |  |
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| Graph of                    |                             | vs            |                             |                            |    |  |
| Slope of the<br>Terminal ve | e graph:<br>locity of the n | nagnet (in cm | Intercep<br>/s) in copper s | ot of the graph<br>ection: | 1: |  |
| Graph on pag                | je number:-                 |               |                             |                            |    |  |





| B.3 (cont.)<br>Length of copper section | of pipe:      |                         |  |
|---|---------------|-------------------------|--|
| Mention only if used                    |               |                         |  |
| Graph of                                | vs            |                         |  |
| Slope of the graph:                     |               | Intercept of the graph: |  |
| Length of the copper sec                | tion (in cm): |                         |  |
| Graph(If any) on page num               | ber:          |                         |  |





#### **B.4** (1.6 pt)**Length of the Wooden section of the pipe:** Fill the appropriate quantities.

| Slope of the | e graph: |    | In | <br>tercept of the | graph: |  |
|--------------|----------|----|----|--------------------|--------|--|
| Graph of     |          | vs |    |                    |        |  |
| ention only  | if used  |    |    |                    |        |  |
|              |          |    |    |                    |        |  |
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