SINGAPORE CHINESE GIRLS' SCHOOL
PRIMARY 6 SCIENCE
2025 Term 1 Weighted Assessment

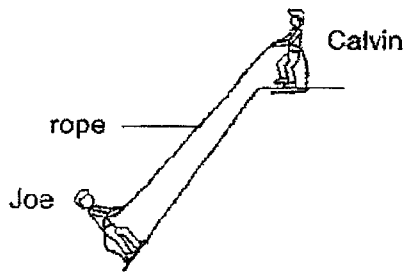
Term 1 WA

Name: _____ ( ) Date: _____
Class: Primary 6 SY / C / G

	Marks Attained	Maximum Marks	
Section A		26	
Section B		14	
Total		40	_____ Parent's signature

Section A (26 marks)
For each question from 1 to 13, four options are given. One of them is the correct answer.
Choose the correct answer and write its number in the Answer Sheet on Page 11.

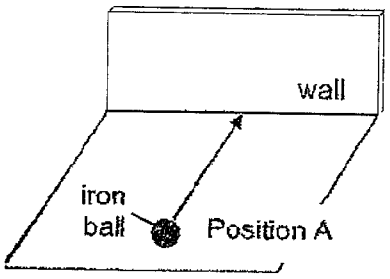
1 Calvin is helping Joe to walk up a steep slope using a rope.



Which of the following correctly shows the force Calvin and Joe exerts on the rope?

	Calvin	Joe
(1)	Pull	Pull
(2)	Pull	Push
(3)	Push	Pull
(4)	Push	Push

2 Lindsey rolled an iron ball towards the wall.



Which is/are the possible effect(s) of forces on the ball?

A The ball changes direction after hitting the wall.

B The ball becomes heavier.

C The ball moves more slowly towards position A after hitting the wall.

D The ball changes its shape.

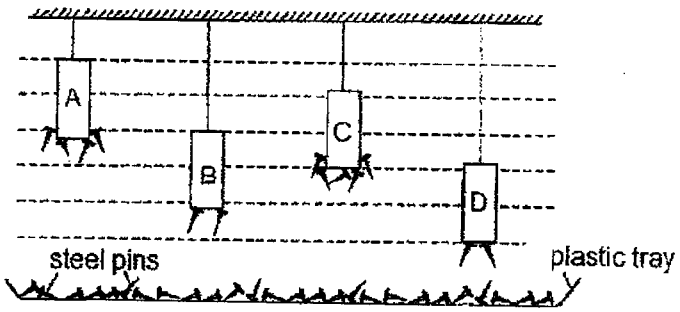
(1) A and B only

(2) A and C only

(3) B and D only

(4) C and D only

3 Four magnets, A, B, C and D, were hung from a ceiling. The magnets were of the same size. The diagram shows the number of steel pins each magnet attracts.



Which one of the magnets is the weakest?

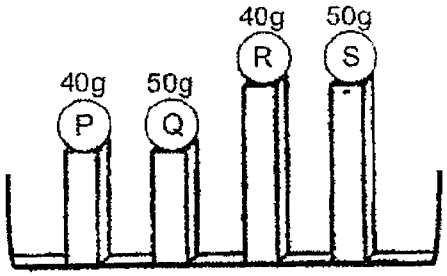
(1) A

(2) B

(3) C

(4) D

4 Shawn placed four balls, P, Q, R and S, of similar sizes but different masses at different heights above a tray of sand.



He predicted that the higher the ball is placed above the tray of sand, the deeper depression it will make.

Which two balls should he use to test his prediction?

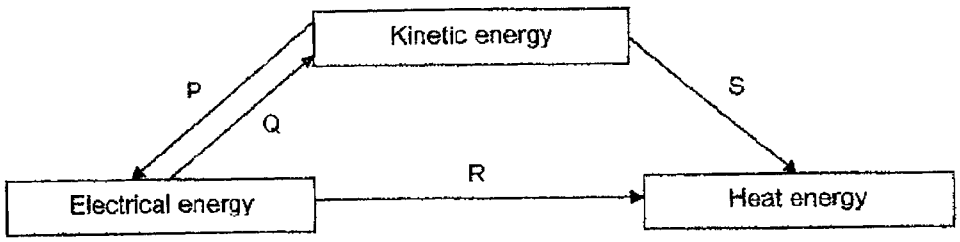
(1) P and Q

(2) P and R

(3) Q and R

(4) R and S

5 The diagram shows how energy can be converted from one form to another.



Which of the following best represent activities P, Q, R and S?

	P	Q	R	S
(1)	Using ceiling fan	Using wind turbine	Using an electric toaster	Sudden braking of a car
(2)	Using wind turbine	Using ceiling fan	Using an electric iron	Rubbing hands together
(3)	Using solar panel	Using a food blender	Watching television	Clapping hands
(4)	Using a food blender	Playing piano	Using a torchlight	Lighting a matchstick

6 Roshan pushed a toy, which was attached to a spring. He closed the lid as shown in Diagram 1. When he opened the lid, the toy jumped up as shown in Diagram 2.

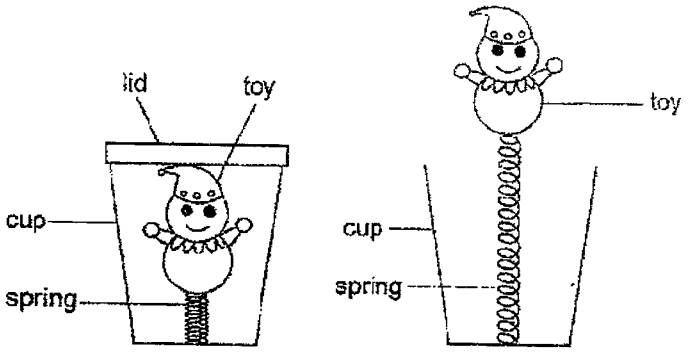
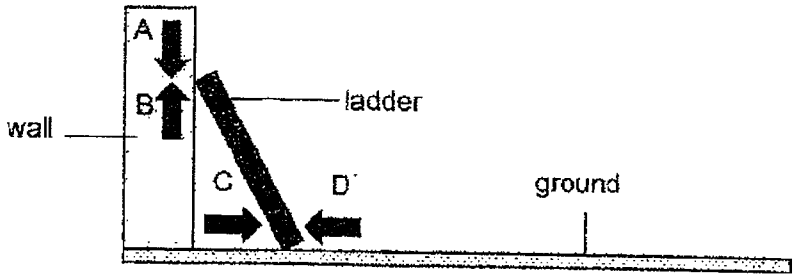


Diagram 1 Diagram 2

Which of the following would make the toy jump higher?

(1) Use a lighter lid.
(2) Use a lighter toy.
(3) Use a heavier cup.
(4) Use a lighter spring.

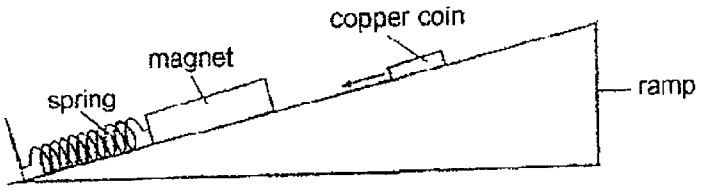
7 Landy placed a ladder against a wall.



Which pair of forces helps to prevent the ladder from sliding off the wall?

(1) A and C
(2) A and D
(3) B and C
(4) B and D

8 Vinod attached a strong magnet to a spring and placed it at the bottom of a ramp. He placed a copper coin at the top of the ramp and observed that it slid towards the magnet.

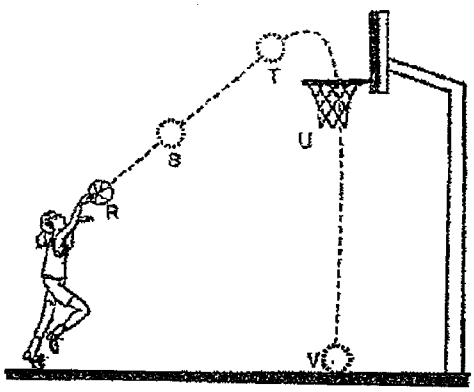


What were the forces acting on the copper coin as it moved along the surface of the ramp?

A frictional force
B magnetic force
C gravitational force
D elastic spring force

(1) A and C only
(2) B and D only
(3) A, B and C only
(4) A, B, C and D

9 Alexis threw a ball into the net as shown.



Which of the following correctly shows the change in kinetic energy as the ball travels from R to T and from U to V?

	R to T	U to V
(1)	Increases	Increases
(2)	Increases	Decreases
(3)	Decreases	Increases
(4)	Decreases	Decreases

10 Tate raised end G of a plank slightly as shown in Figure 1 but wooden block H did not slide down. When end G was raised high enough, Tate observed wooden block H sliding down as shown in Figure 2.

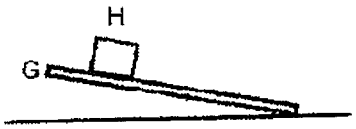


Figure 1

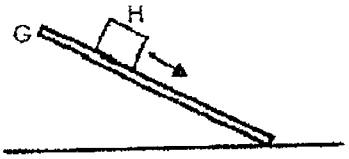
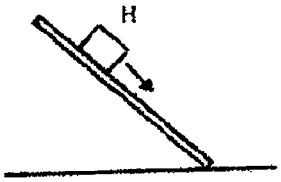


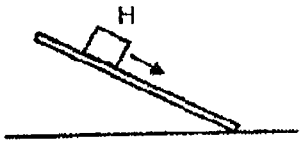
Figure 2

Tate repeated the experiment with three identical planks of different surfaces and raised end G until the wooden block H slide down as shown.



Surface X

Surface Y

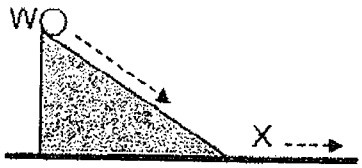


Surface Z

Which of the following correctly shows the amount of frictional force between wooden block H and the surface?

	Most friction →		Least friction
(1)	X	Y	Z
(2)	X	Z	Y
(3)	Y	X	Z
(4)	Y	Z	X

11 A ball was released at point W. It rolled along the set-up as shown.

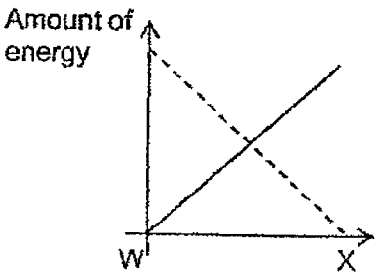


Comparing the potential energy (PE) and kinetic energy (KE) of the toy as it moves from W to X, which one of the following graphs is correct?

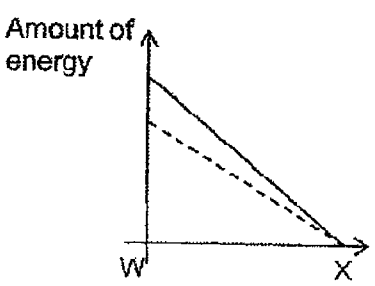
KE ——————

PE - - - - - - - - - -

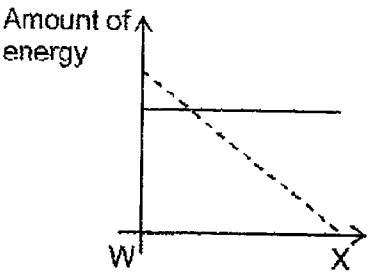
(1)



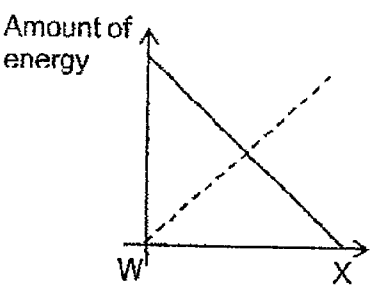
(2)



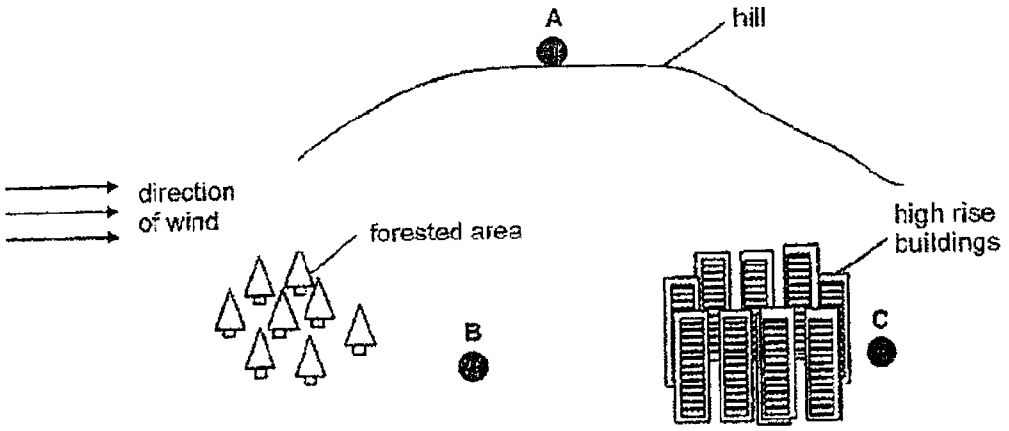
(3)



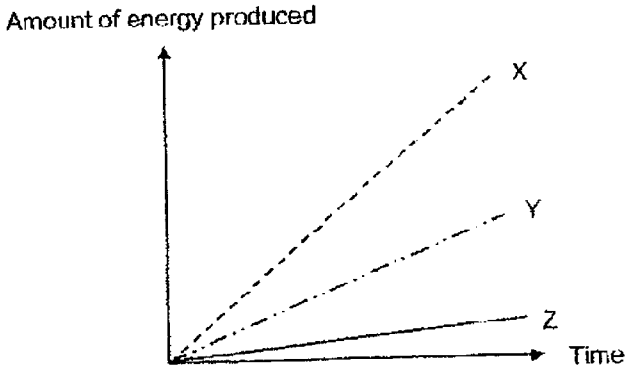
(4)



12 Three similar wind turbines X, Y and Z were placed at different locations A, B and C as shown below.



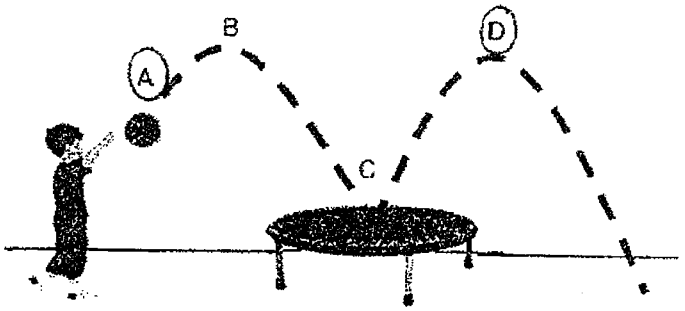
The amount of electrical energy generated by each wind turbine was measured and recorded in a graph below.



Based on the results in the graph, which of the following most likely represents the locations of the windmills X, Y and Z?

	Windmill X	Windmill Y	Windmill Z
(1)	B	C	A
(2)	C	B	A
(3)	A	B	C
(4)	A	C	B

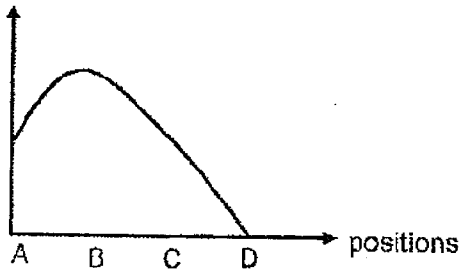
13 The diagram below shows the path of a ball when it was thrown onto a trampoline.



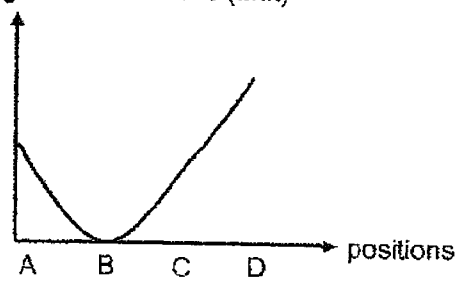
Points A, B, C and D are the different positions along the path travelled by the ball.

Which of the following graphs shows how the amount of gravitational force acting on the ball changes as it travels from A to D?

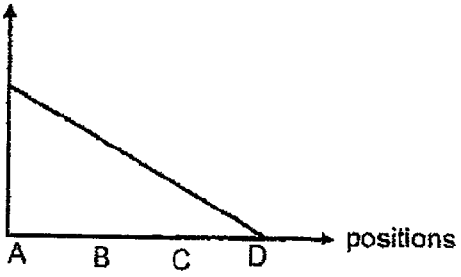
(1)



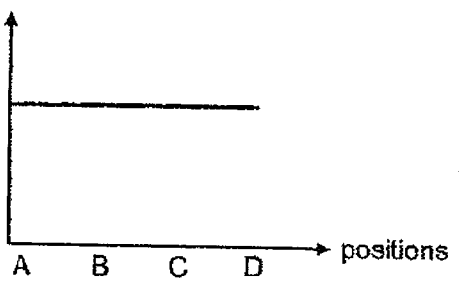
(2)



(3)



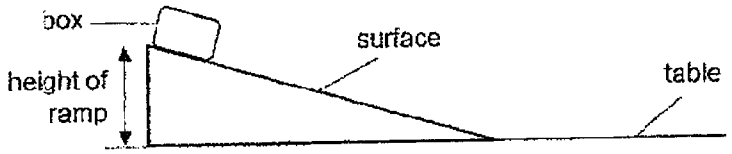
(4)



Section B (14 marks)

For Questions 14 to 18, write your answers in the space provided.

14 Kate investigated how the height of the ramp affects the distance a box travels. She set up the experiment by releasing a box from the top of a ramp at different heights.



She recorded the distance that the box moved on the table.

Height of Ramp (cm)	Distance moved (cm)		
	Trial 1	Trial 2	Trial 3
15	5.8	6.0	5.9
5	3.2	1.2	4.5
10	4.2	4.3	4.0

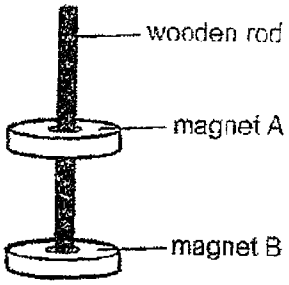
(a) From the results, it was observed that the box moved a greater distance on the table when the height of ramp increased. Explain why. [2]

(b) Suggest why Kate repeated the experiment twice for each height of the ramp. [1]

(c) After looking through Kate's results, her teacher suggests that she conducts the experiment again. Provide a suitable explanation why her teacher made the suggestion. [1]

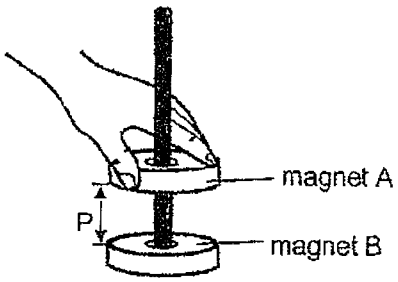
4

15 Jiarui used the set-up shown below to investigate the magnetic force between two magnets.



(a) Explain why magnet A floated above magnet B as shown above. [1]

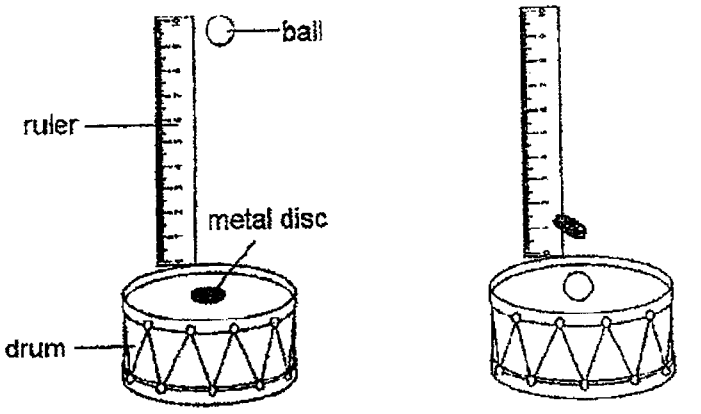
Jiarui pushed magnet A towards magnet B as shown below.



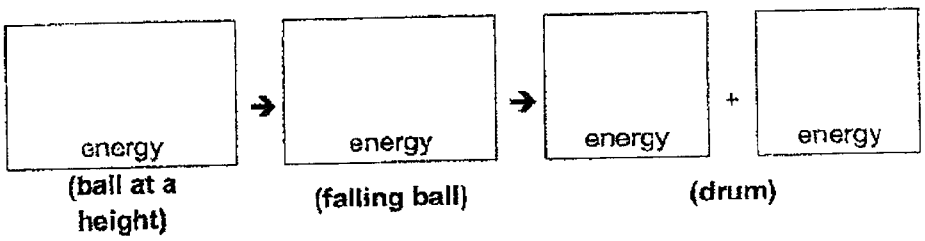
(b) He realised that he needed to use more force as distance P decreased. Explain why. [1]

2

16 Julius conducted the experiment below to investigate how the height of a ball above a drum affects the height a metal disc bounces to. The metal disc bounces up as the ball hits the drum.



(a) Fill in the boxes below to show the energy conversion that took place. [1]



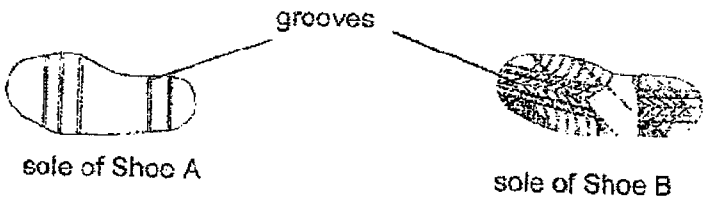
(b) Suggest two ways Julius can increase the height of the metal disc bounces without changing the drum and the metal disc. [2]

Method 1: _____

Method 2: _____

3

17 Katy has to choose from two pairs of shoes for her outdoor hike. The diagram below shows the soles of the the shoes.



sole of Shoe A

sole of Shoe B

(a) Which shoe should she choose? Explain your choice. [2]

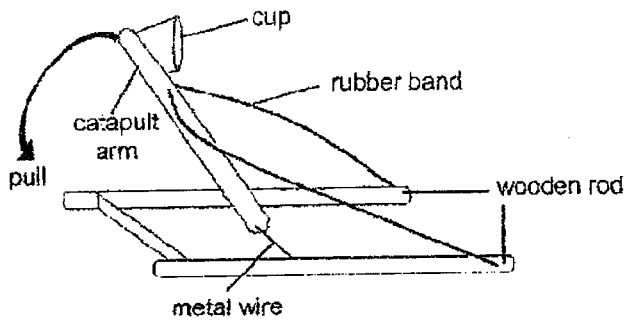
(b) Katy observed that the soles of her shoes had missing grooves after wearing for a few months.

Explain why she has to be more careful when walking on wet floor. [1]

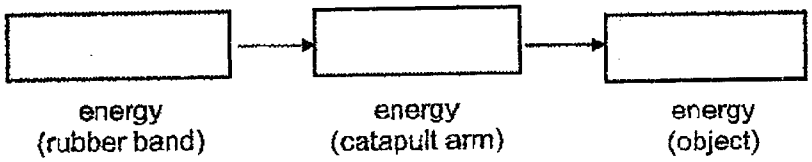
3

18 Johan made a toy catapult as shown below.

An object is placed in the cup and the catapult arm is pulled back. When the catapult arm is released, it swings back up, tossing the object into the air.



(a) State the energy conversion that took place in the toy catapult. [1]



(b) Johan wants to toss a marble as far as possible. Should he use a short rubber band or a long one? Give a reason for your answer. [1]

_____

_____

2

Term 1 WA

SINGAPORE CHINESE GIRLS' SCHOOL
PRIMARY 6 SCIENCE
2025 Term 1 Weighted Assessment

Name: _____ ( ) Date: _____

Class: Primary 6 SY / C

Answer Sheet for Section A (26 marks)

1. ( )
2. ( )
3. ( )
4. ( )
5. ( )
6. ( )
7. ( )
8. ( )
9. ( )
10. ( )
11. ( )
12. ( )
13. ( )

YEAR : 2025
LEVEL : PRIMARY 6
SCHOOL : SINGAPORE CHINESE GIRLS' SCHOOL
SUBJECT : SCIENCE
TERM : TERM 1 WEIGHTED ASSESSMENT

Q1	1	Q2	2	Q3	4	Q4	2	Q5	2
Q6	2	Q7	4	Q8	1	Q9	3	Q10	2
Q11	1	Q12	3	Q13	4				

Q14	a)	When the height of the ramp increased, the box gained more gravitational potential energy, converted into more kinetic energy when the box travels down the ramp, causing the box to move a greater distance on the table.
	b)	To ensure the reliability of the results.
	c)	For the height of the ramp at 5cm, the difference between Trial 1, 2, and 3 are towide.
Q15	a)	The like poles of magnets A and B were facing each other, causing the magnetic force of repulsion to act on them.
	b)	As distance P decreased, magnet A moved closer to magnet B, so the magnetic force of repulsion grew stronger. Thus, he needed to use more force as distance P decreased.
Q16	a)	Gravitational potential → kinetic → kinetic + sound
	b)	Method 1: Drop the ball from a greater height Method 2: Use a heavier ball
Q17	a)	Shoe B. The sole of shoe B has more grooves, so there will be more frictional fore between the shoe B and the ground, compared to shoe A reducing the chances of her slipping during the outdoor hike.
	b)	Water is a lubricant and reduces friction between the shoe and the ground.
Q18	a)	elastic → kinetic → kinetic
	b)	He should use a short rubber band. When he stretches the shorter rubber band will be more stretched, there will be more elastic potential energy stored in the rubber band, converted in to more kinetic energy in the catapult, converted into more kinetic energy in the marble, so the marble will be tossed further.

1

END