

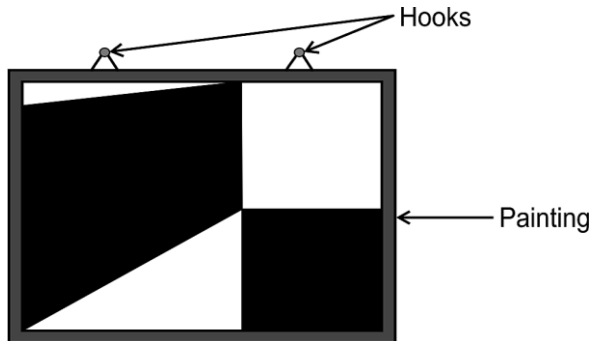
NAS/ SEAS/ SLAS PRACTICE TESTS

SET -I

Grade 3

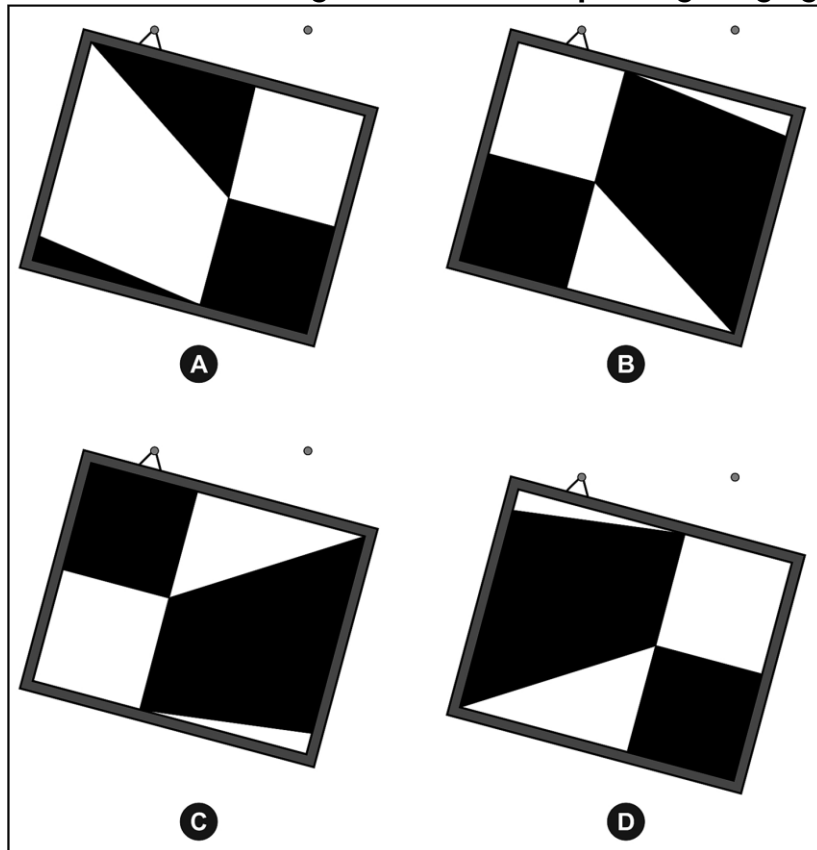
Mathematics

Q1. A painting with two hooks is hung on a wall.



One of the hooks breaks.

Which of the following shows the same painting hanging on one hook?



Q2. Shown below are the prices of some items.



Rs 7



Rs 25

Sanjana bought TWO chocolates and ONE packet of bread. What is the total amount she must pay?

- A. 32 B. 39 C. 57 D. 64**

Q3. A green bus and a blue bus were used to take some students for a picnic. There were 57 students in the green bus. The blue bus had 13 MORE students than the green bus.

Which of these gives the TOTAL number of students going for the picnic?

- A. $57 - 13$ B. $57 + 13$ C. $57 + 57 - 13$ D. $57 + 57 + 13$**

Q4. Which of the following options is the same as $6 + 8 + 4$?

- A. $6 \times 4 \times 8$ B. $10 + 8$ C. $64 + 8$ D. 684**

Q5. Given below are the dates of birth of four friends:

Ryan - 5 January 2013

Siddhi - 1 August 2012

Alina - 31 December 2013

Krish - 15 March 2012

Who turned 1 year old first?

- A. Ryan B. Siddhi C. Alina D. Krish**

Environmental Science

Q1. Which of the following contains food items obtained from BOTH plant and animal sources?

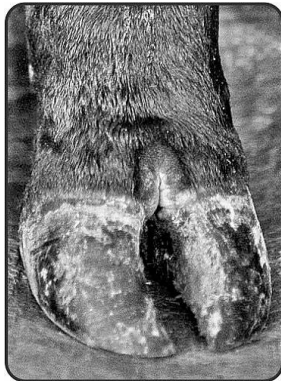
- A. milk and toast
- B. honey and curds
- C. boiled egg and cheese
- D. orange juice and potato wafers

Q2. What is common to these parts of the human body?

eyes, ears, nose, nails

- A. They are found in pairs.
- B. They are all seen on the head.
- C. They can be seen outside the body.
- D. They help us to know our surroundings.

Q3. The foot of an animal is shown below.



Which of the following animals could it be?

- A. elephant
- B. lion
- C. dog
- D. cow

Q4. Which of the following shows a part of a cat's face?



A



B

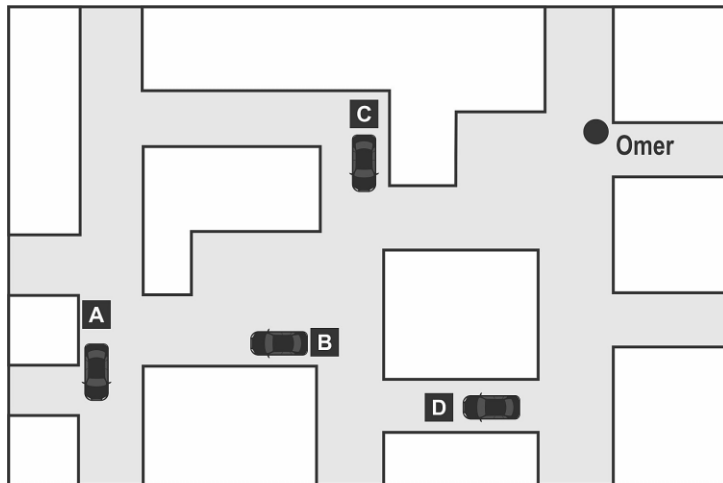


C



D

Q5. Which of the parked cars will Omer be able to see from the place where he is standing?



- A.** A
- B.** B
- C.** C
- D.** D

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -I

Grade 6

Mathematics

Q1. Rahul bought some sweets. The sweet vendor packed the sweets in 6 small boxes with 4 sweets in each box. Rahul asked him to pack the sweets in larger boxes. Then, the sweet vendor packed them in 3 larger boxes.

If each box had an equal number of sweets, with no sweets left over, how many sweets did he pack in each of the larger boxes?

- A. 4 B. 8 C. 12 D. 24**

Q2. Read the statements three friends made.

Tanvi: I have 25 fewer books than Nakul.

Nakul: I have 4 more books than Sindhu.

Sindhu: I have 40 books.

How many books does Tanvi have?

- A. 11 B. 15 C. 19 D. 29**

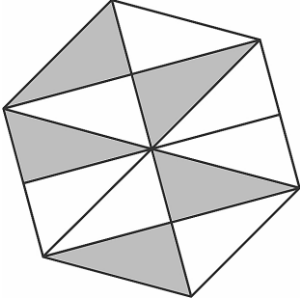
Q3. Kiran hired a person to take care of his pet dog and the garden while he is on a trip. The person charges Rs 300 per week for gardening and Rs 50 per day to take care of the dog.

If Kiran hires the person for two weeks, how much does he need to pay?

- A. 700 B. 1300 C. 2450 D. 4900**

Q4. The figure below is divided into small triangles of the same size. Five of such triangles are shaded.

How many MORE small triangles need to be shaded so that a half of the figure is shaded?



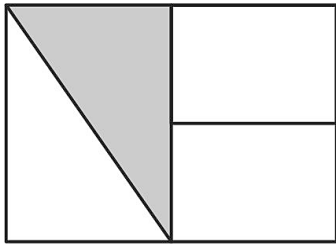
A. 6

B. 3

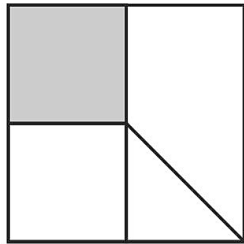
C. 1

D. 0

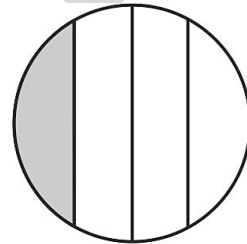
Q5. In which of these figures is $\frac{1}{4}$ of the shape shaded?



(i)



(ii)



(iii)

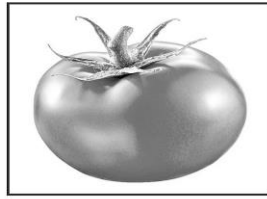
- A. only (i)
- B. only (iii)
- C. only (i) and (ii)
- D. only (ii) and (iii)

Environmental Science

Q1. Thomas buries the following items in the soil in his garden.



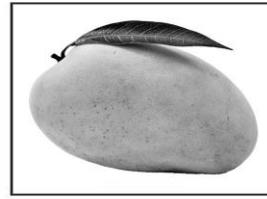
Onion
A



Tomato
B



Carrot
C



Mango
D

From which of them are **MANY** plants likely to grow?

- A. A
- B. B
- C. C
- D. D

Q2. Atul and Peter have the four vegetables shown below.



Potato



Ladies' finger



Carrot



Cabbage

Atul chooses one vegetable secretly. Peter has to ask Atul questions to find out which vegetable he has chosen. Atul will answer only 'Yes' or 'No'.

Peter first asks: "Does it grow underground?"

Atul answers: "Yes"

Which of the following questions should Peter now ask to find out what vegetable Atul has chosen?

- A. "Does it taste sour?"
- B. "Does it have seeds?"
- C. "Is it generally eaten raw?"
- D. "Can it grow into a new plant?"

Q3. Jaya had to climb a plant to pluck its fruits. Which of the following could the fruit be?



Jamun
A



Grapes
B

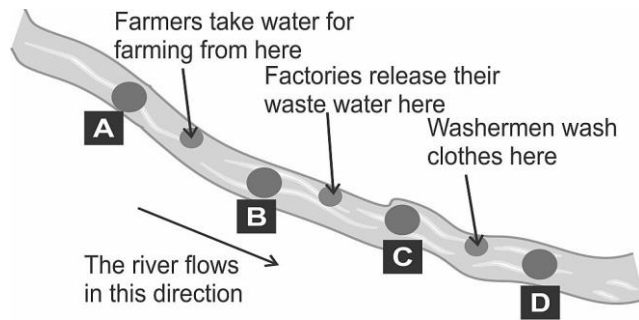


Cucumber
C



Watermelon
D

Q4. Shown below is a river flowing through a town. At which of the marked places will the water have the MOST amount of dissolved impurities?



- A. A
- B. B
- C. C
- D. D

Q5. Rashid has grouped some food materials as shown in the table.

Obtained from plants	Not obtained from plants
 ghee	 salt
 cooking oil	 turmeric

Which of the food materials has he placed in the wrong group?

- A. cooking oil, turmeric
- B. cooking oil, salt
- C. ghee, turmeric
- D. ghee, salt

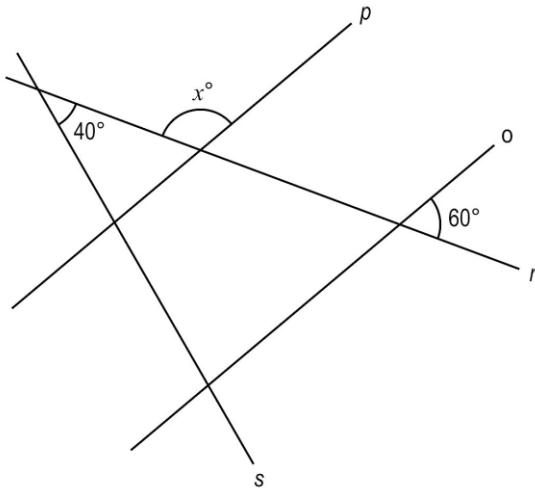
NAS/ SEAS/ SLAS PRACTICE TESTS

SET -I

Grade 9

Mathematics

Q1. In the figure below, line p is parallel to line o and, line s and line r are two transversal lines intersecting at 40° .



(Note: The figure is not to scale.)

What is the value of x ?

- A. 140 B. 120 C. 60 D. 40

Q2. What number should come in the place of x ?

$$56 \div 5^x = 56$$

- A. 0 B. 1 C. 5 D. 6

Q3. Which of these is the same as $3^{65} + 3^{65} + 3^{65}$?

- A. $3^{(65+1)}$ B. $(3 + 3 + 3)^{65}$ C. $3^{(65+65+65)}$ D. $(3 + 3 + 3)^{(65+65+65)}$

Q4. Ram went to a fair. He spent $\frac{1}{4}$ of his money on food and $\frac{2}{3}$ of the REMAINING money on rides.

If he is left with Rs. 276, how much money did he have at the beginning?

- A. 3312 B. 1104 C. 552 D. 483**

Q5. Paul's monthly pocket money is 22% more than John's.

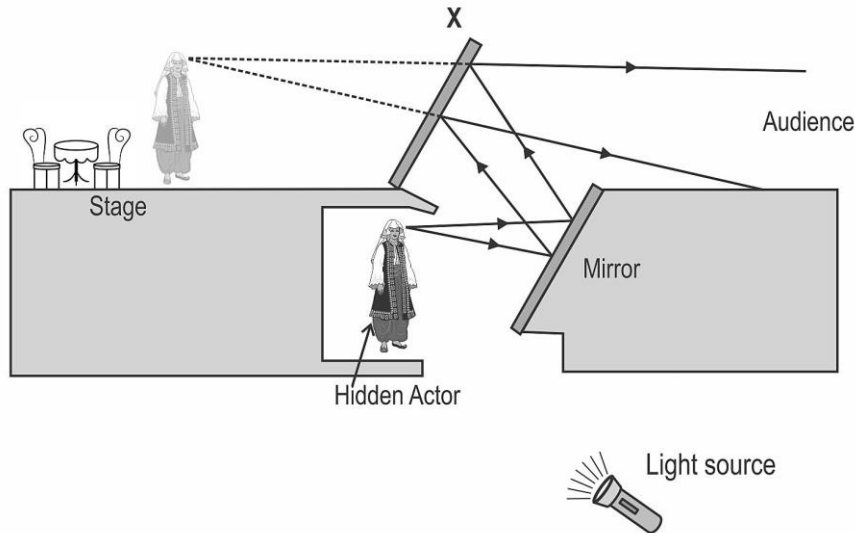
If John's monthly pocket money is Rs 500, which of these represents Paul's monthly pocket money in Rupees?

- A. $500 \times \frac{122}{100}$ B. $500 \times \frac{22}{100}$ C. $500 + \frac{122}{100}$ D. $500 + 22$**

SCERT AP

Science

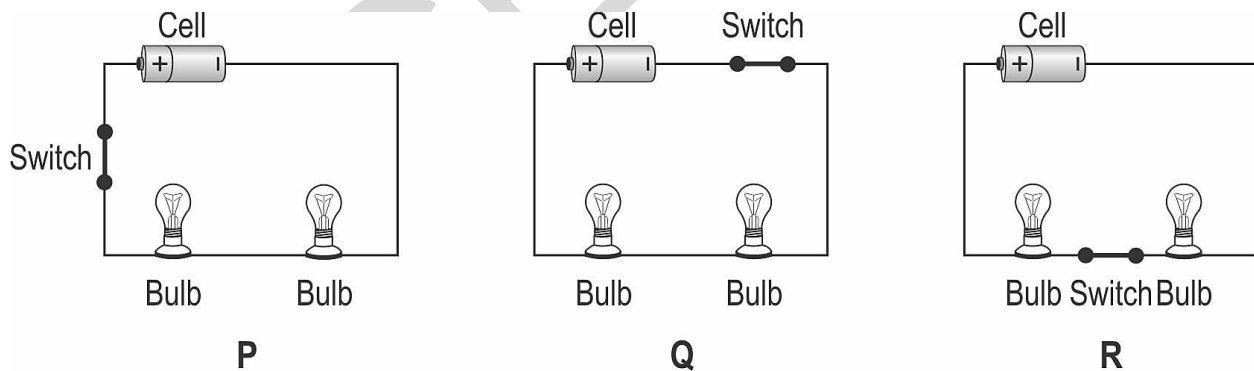
Q1. The arrangement shown below was used in 19th century theatres to create images of ghosts that could appear and disappear at will, during a play. The chairs and table appear normally to the audience all the time.



Which of the following properties should the object X have?

- A. It should be transparent, and should reflect light regularly.
- B. It should be an opaque mirror that is very flat and very thin.
- C. It should be translucent since the ghost should not appear very bright.
- D. It could be transparent, translucent or opaque as long as it reflects light regularly.

Q2. Both the bulbs are glowing in the three circuits P, Q and R shown below.



In which circuit will BOTH the bulbs stop glowing when the switch is opened?

- A. only P
- B. only R
- C. only P and Q
- D. all - P, Q and R

Q3. Growing which type of crops continuously for many years on a sloping hill side is MOST likely to cause soil erosion?

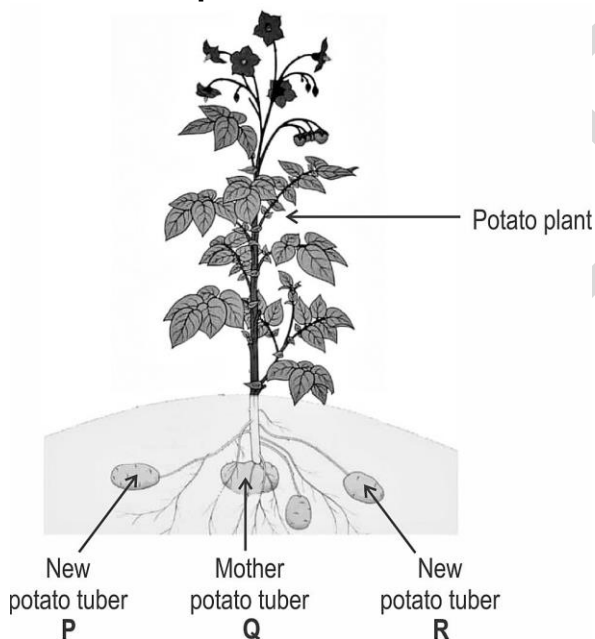
- A. plants whose roots are dug up for use as vegetables
- B. fruit trees whose branches are trimmed every year
- C. thin-stemmed plants which spread on the ground
- D. grass which is grown and cut as fodder for cattle

Q4. A plant cell uses oxygen to release energy and produces carbon dioxide in the process. Where and when could this process be taking place?

- P) in a leaf cell during the day
- Q) in a leaf cell during the night
- R) in a root hair cell during the day
- S) in a root hair cell during the night

- A. only Q
- B. only P and R
- C. only Q and S
- D. any of - P, Q, R and S

Q5. The picture is of a potato plant grown from a mother potato tuber Q. The plant has also produced new potato tubers P and R.



The three potato tubers are taken out and buds from these are used to grow new potato plants.

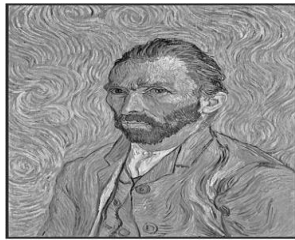
Which of these new potato plants are exact copies of each other?

- A. only plants grown from buds on Q
- B. only plants grown from buds on P and on Q
- C. only plants grown from buds on P and on R
- D. plants grown from buds on all - P, Q and R

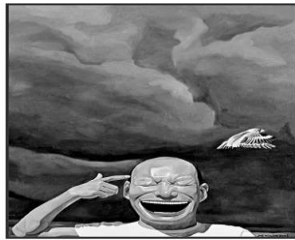
Social Science

Q1. Realism is an artistic movement which began in France in the 1850s. Realist painters depicted ordinary life accurately. They avoided exaggerated emotions, and were objective, without decoration or interpretation.

Identify the work of art which best fits the realist art style.



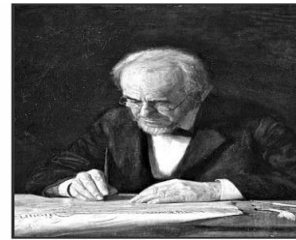
A



B



C



D

- A. A
- B. B
- C. C
- D. D

Q2. A widely circulated quote says:

"Democracy is two wolves and a lamb voting on what to eat for lunch. Freedom comes from the recognition of certain rights which cannot be taken away, not even by a 99 per cent vote."

Which of these statements best describes this quote?

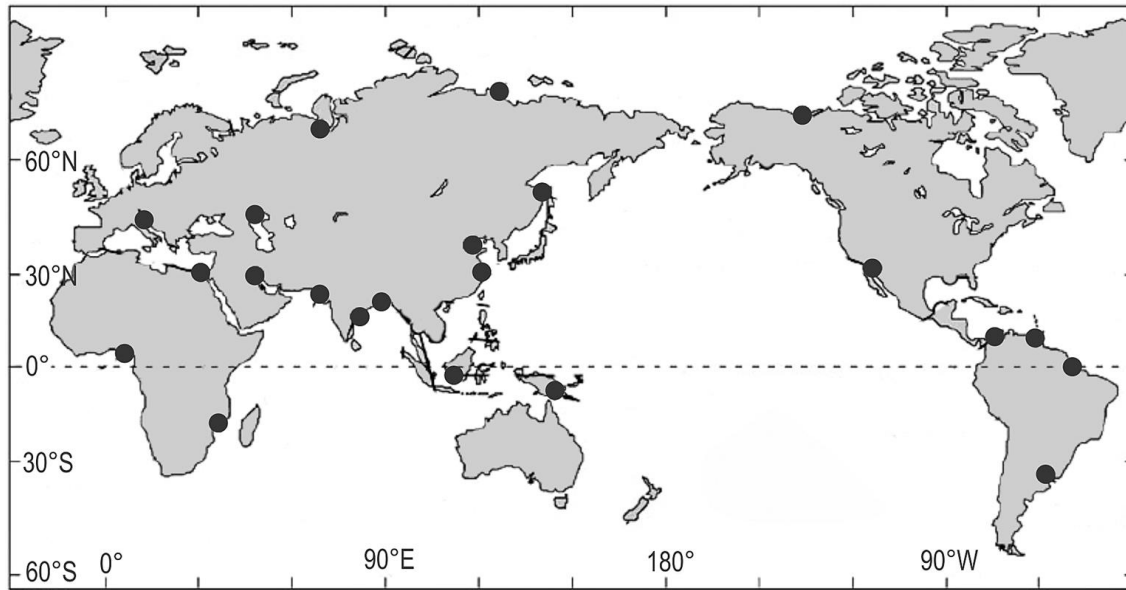
- A. Democracy forces people to make decisions that harm themselves.
- B. Democracy guarantees a positive future and solves many social problems.
- C. Democracy can lead to oppression even though in theory it seems to be fair.
- D. Democracy is the only way in which everyone can have freedom and equality.

Q3. It is important to distinguish between facts and opinions. One of the following statements is a fact, the rest are opinions.

Identify the statement that is a fact.

- A. Water is an important factor affecting agricultural productivity, especially in regions that are rain-fed.
- B. All possible efforts are being made by the central government to provide adequate assistance to farmers.
- C. A central cooperative body similar to the one they have in the US has the potential to improve agriculture.
- D. The government should create apps that enable farmers to get high-quality advice on their mobile phones.

Q4. Which of these best describes the regions at the locations marked on the map below?



- A. peninsulas
- B. isthmuses
- C. deltas
- D. bays

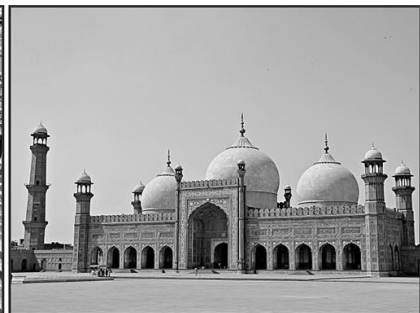
Q5. All three monuments shown above are examples of structures that _____.



Temple at Thanjavur built by Raja Raja Chola



Stepwell in Karnataka built by the later Chalukyas



Badshahi Mosque in Lahore built by Emperor Aurangzeb

- A. were carved out of a single rock
- B. were created at around the same time
- C. were built by rulers for the local people
- D. used the Indo-Islamic style of architecture

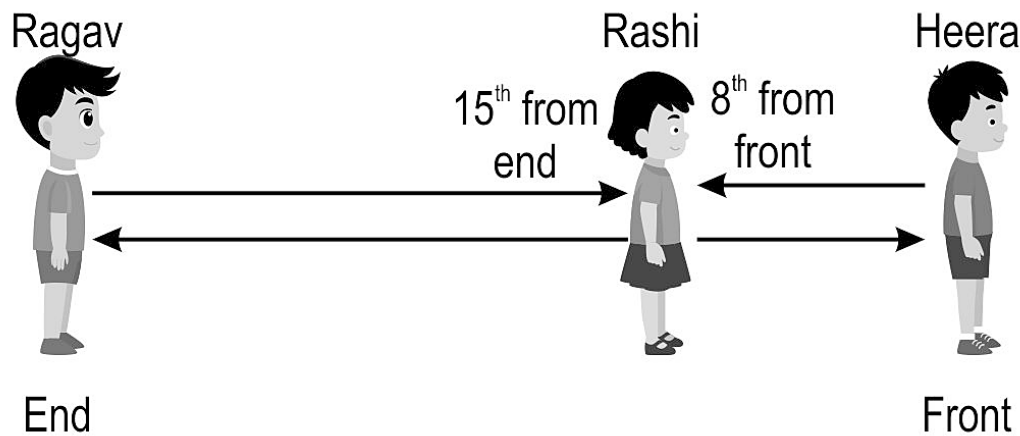
NAS/ SEAS/ SLAS PRACTICE TESTS

SET – II

Grade 3

Mathematics

Q1. Rashi is standing in a queue. Her position in the queue is as shown below.



How many people are there in the queue in all?

A. 23

B. 22

C. 21

D. 15

Q2. Which of the following has a larger value than 5×6 ?

A. 7×5

B. 9×2

C. 6×5

D. 3×10

Q3. Manu had a doctor's visit on Monday, 11 February. He has to visit again on Tuesday of the next week.

What is the date of his next visit?

A. 17th February
February

B. 18th February

C. 19th February

D. 20th

Q4. A teacher gives her students a worksheet with FIVE QUESTIONS everyday. She awards her students a star for every completed worksheet.

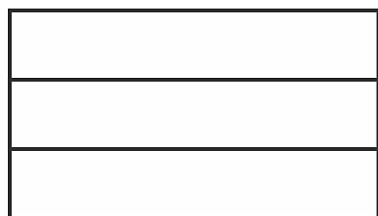
Here are the stars two students earned in the last week.

Pia	★
Suri	★ ★ ★

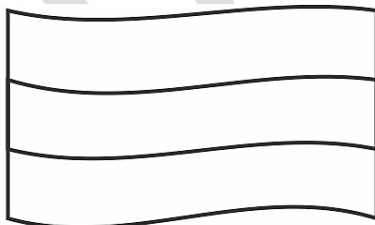
How many MORE QUESTIONS did Suri answer than Pia?

- A. 2 B. 10 C. 15 D. 20**

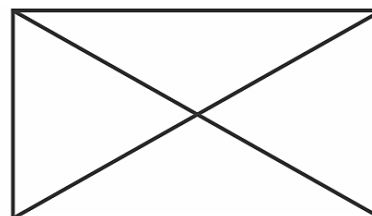
Q5. Shown below are three figures - 1, 2 and 3.



1



2



3

Which of these figures is/are made of ONLY STRAIGHT lines?

- A. only 1 B. only 1 and 2 C. only 1 and 3 D. all - 1, 2 and 3**

Grade 3
Environmental Science

Q1. Which of the following food items has DEFINITELY been prepared by cooking?



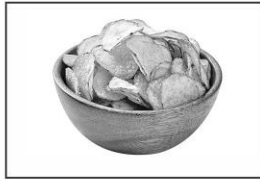
Chopped fruits
A



Watermelon juice
B



Vegetable salad
C



Potato chips
D

Q2. Four animals are shown below.



Butterfly



Crow



Black ant



Duck

Which of the following statements is true for ALL of them?

- A. They can fly.
- B. They can walk.
- C. They have a beak.
- D. They have feathers.

Q3. How many animals are there in the picture?



- A. 2
- B. 3
- C. 4
- D. 5

Q4. What is COMMON among the living things shown below?



- A. They need water.
- B. They live on land.
- C. They make their own food.
- D. They can move from one place to another.

Q5. Jack lives in an apartment near his Uncle's house. He lives with his father, mother and baby sister. His family is called a _____.

- A. joint family
- B. nuclear family
- C. neighbour family
- D. single parent family

NAS/ SEAS/ SLAS PRACTICE TESTS

SET – II

Grade 6

Mathematics

Q1. Choose the correct option to fill in the blank.

$$250 + 1560 = \underline{\hspace{2cm}} + 500$$

A. 1060

B. 1310

C. 1810

D. 2310

Q2. The calendar for February 2024 is shown below.

February - 2024						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

On 1st April 2024, what day of the week will it be?

A. Monday

B. Friday

C. Saturday

D. Sunday

Q3. Which of these is four thousands and twenty tens?

A. 4200

B. 4210

C. 42010

D. 402010

Q4. Look at the number pattern given below.

3, 6, 12, 24, 48, _____ ?

Which of these shows how to find the next number in the pattern?

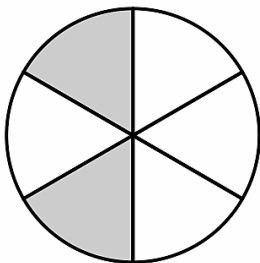
A. multiply 2 with 48

B. multiply 3 with 48

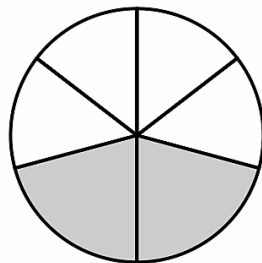
C. add 24 to 48

D. add 3 to 48

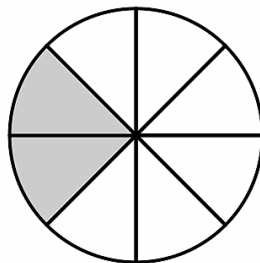
Q5. Which of the circles below is/are $\frac{2}{6}$ shaded?



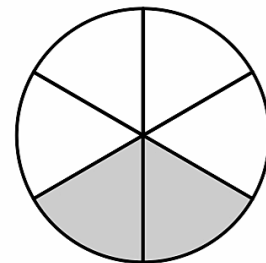
(i)



(ii)



(iii)



(iv)

A. only (iii)

B. only (i) and (iv)

C. only (ii) and (iv)

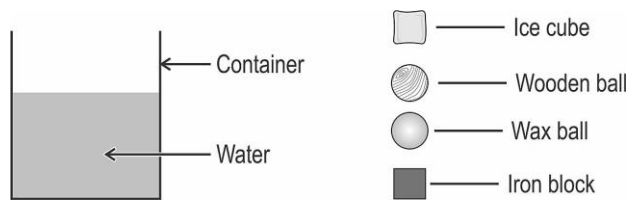
D. only (i), (ii) and (iv)

Environmental Science

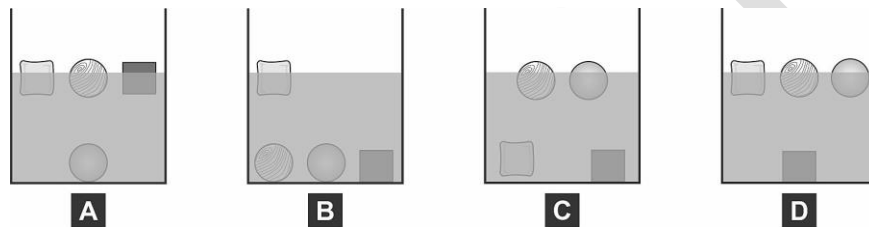
Q1. Which of the following states a correct difference between dogs and buffaloes?

- A. Dogs are domestic animals, while buffaloes are not.
- B. Dogs have hair on their body while buffaloes do not.
- C. Dogs have sharp tearing teeth while buffaloes do not.
- D. Dogs feed their young ones with milk, while buffaloes do not.

Q2. Kabir has some water in a container. He drops an ice cube, a wooden ball, a wax ball and an iron block in the water.



How is the container likely to look?



Q3. Robert collected some information about his favourite animals and recorded it in the table below.

Animal	Does it have ears outside its body?	What does it eat?	Does it produce milk?
Elephant	Yes	Plants	Yes
Hen	No	Seeds and worms	No
Cow	Yes	Plants	Yes
Tiger	Yes	Other animals	Yes
Frog	No	Insects and small animals	No
Parrot	No	Seeds and fruits	No

What can he DEFINITELY say about these animals based on this information?

- A. All these animals produce milk.
- B. The animals that produce milk eat only plants.
- C. The animals that produce milk have ears outside their body.
- D. The animals that have ears outside their body eat only plants.

Q4. Sylvia got some grapes and made raisins from them by drying them in the sun.



She had counted the number of grapes in 100 g of grapes. She also took 100 g of raisins she had made and counted their number.

Which of the following is true about the numbers she counted?

- A.** Raisins were greater in number than grapes.
- B.** Grapes were greater in number than raisins.
- C.** The numbers were the same for grapes and raisins.
- D.** The numbers could be the same or unequal depending on how long the grapes were dried.

Q5. In which option are the following arranged in the INCREASING order of temperature?

Boiling water	Flame of stove	Air on a hot summer day
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- A.** the flame of a stove, air on a hot summer's day, boiling water
- B.** air on a hot summer's day, boiling water, the flame of a stove
- C.** air on a hot summer's day, the flame of a stove, boiling water
- D.** boiling water, the flame of a stove, air on a hot summer's day

NAS/ SEAS/ SLAS PRACTICE TESTS

SET – II

Grade 9

Mathematics

Q1. A company has 45% of its total number of products at its factory, 30% at its warehouse and the rest in its shop.

What is the ratio of the number of products in its factory to the number of products in its shop?

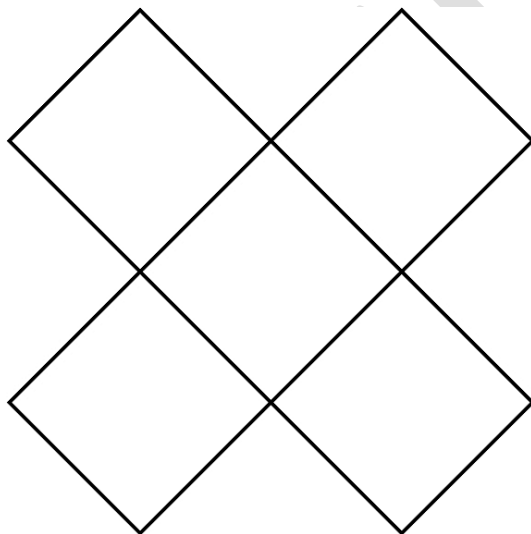
A. 9:4

B. 9:5

C. 9:11

D. 9:20

Q2. The figure below is composed of 5 identical squares.



The total area of the figure is 180 sq cm. What is the perimeter of the figure?

A. 9 cm

B. 36 cm

C. 72 cm

D. 120 cm

Q3. Two cars took the same route from Dehradun to Delhi without stopping. The ratio of the average speed of car P to that of car Q was 4:7.

If car P takes 280 minutes to reach Delhi, how long will car Q take to reach the same destination?

- A. 490 minutes B. 178 minutes C. 160 minutes D. cannot say**

Q4. Which of the following numbers gives (-12) when multiplied by (-4)?

- A. -48 B. -3 C. 3 D. 48**

Q5. A 5-digit number p , when divided by 15, leaves 5 as the remainder.

Which of the following will definitely be a multiple of 30?

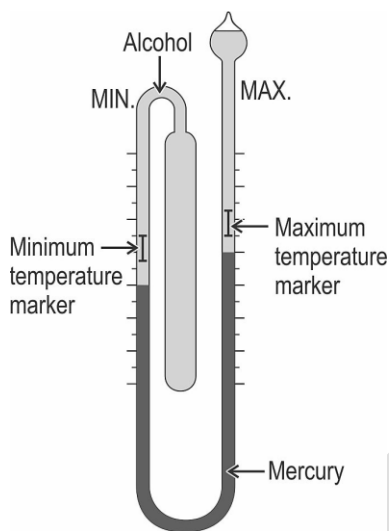
- A. $p - 5$ B. $2(p - 5)$ C. $p - 5 + 30$ D. $p - 5 + 15$**

Science

Q1. The air is cooler in places near forests than in open, non-forested places. Which of the following phenomena is the cause for this?

- A. photosynthesis
- B. condensation
- C. transpiration
- D. respiration

Q2. A maximum-minimum thermometer is shown in the diagram.



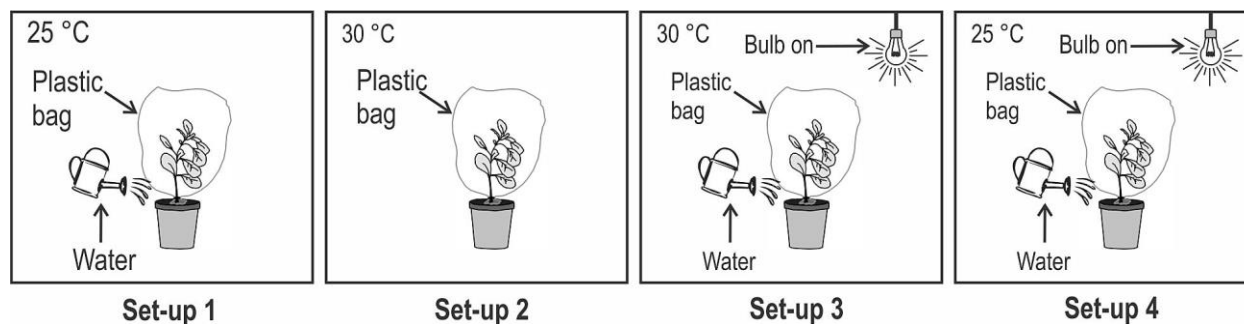
The maximum and minimum temperatures are marked by two steel markers in the two arms. When the temperature is rising, the alcohol expands and pushes the mercury which in turn pushes the maximum marker in the right column. When the temperature starts falling, alcohol contracts, pulling the mercury column which then pushes the minimum marker upwards in the left column. After taking the readings, the two steel markers are pulled back everyday to the mercury column by the use of an external magnet.

Karishma was using such a thermometer to record temperatures everyday. On Sunday, she noted down the following readings: Max: 27 °C and Min: 18 °C. She forgot to reset the steel markers that day. On Monday, she found the maximum marker at 27 °C and minimum marker at 16 °C.

What could have been the possible maximum and minimum temperatures for Monday?

- A. Max: 27 °C, Min: 18 °C
- B. Max: 27 °C, Min: 15 °C
- C. Max: 25 °C, Min: 16 °C
- D. Max: 30 °C, Min: 16 °C

Q3. Pritish wants to find out if temperature affects the rate of transpiration. He arranged experimental set-ups using identical plants in closed rooms as shown below. He measured the amount of water collected in the plastic bags after three hours.



In which of the set-ups should he compare the amount of water collected to find out the effect of temperature?

- A. Set-ups 1 and 3
- B. Set-ups 1 and 2
- C. Set-ups 2 and 4
- D. Set-ups 3 and 4

Q4. Bile juice helps in the digestion of fats in the human body. In which part(s) of the digestive system does digestion of fats occur?

- A. only small intestine
- B. only liver and small intestine
- C. only stomach and small intestine
- D. all - liver, stomach and small intestine

Q5. In which of the following systems are BOTH physical and chemical changes occurring?

- A. blue copper sulphate solution turning lighter blue in colour on adding water
- B. the level of mercury rising in a thermometer placed in hot water
- C. a potato placed in boiling water
- D. ice melting in water

Social Science

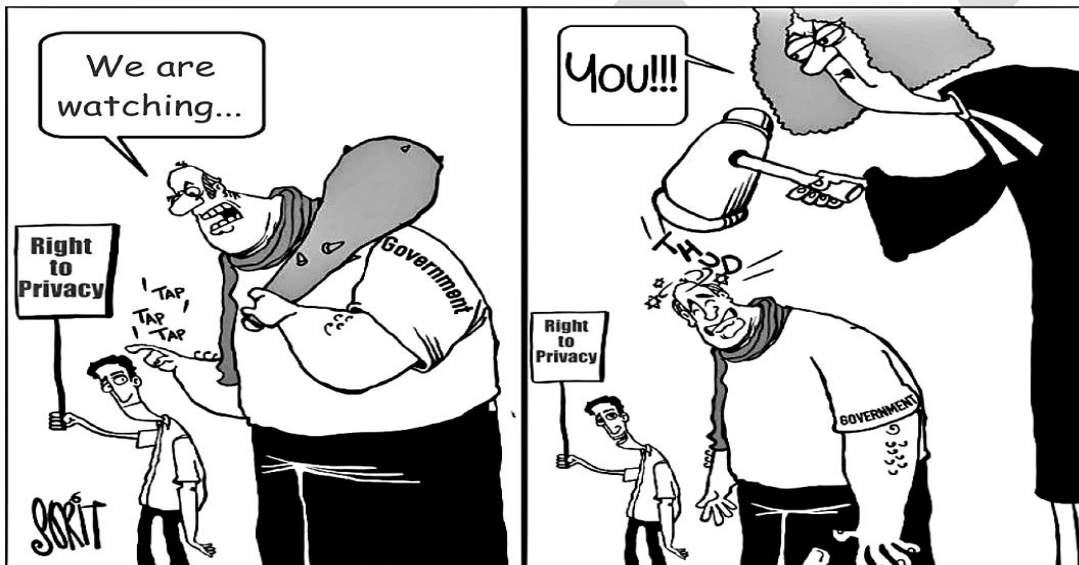
Q1. Pollution can be of two types:

- Point source of pollution is a single identifiable source of pollution.
- Non-point source pollution results from many scattered sources, this kind of pollution cannot be traced back to a single source.

Which of the following is most likely to be a non-point source of pollution in a river?

- A. a raw sewage pipe emptying into it
- B. industrial waste from a refinery emptying into it
- C. chemicals and grease washed off roads running into it
- D. discharge from a wastewater treatment plant running into it

Q2. The cartoon provides an example of the system of checks and balances between the executive, judicial and legislative arms.



(Source: downtoearth.org)

It shows _____.

- A. the executive branch overriding the judiciary
- B. the legislative branch performing judicial functions
- C. judicial review over legislative and executive actions
- D. legislatures reviewing the functioning of the executive

Q3. This map shows the epicentre of an earthquake.



The approximate geographical coordinates of locations are given below.

Which of these locations would have been closest to the epicentre and likely to have experienced aftershocks?

- A. 22° N, 88° E
- B. 21° N, 105° E
- C. 13° N, 80° E
- D. 11° N, 92° E

Q4. Given below are some historical encounters:

- Chandragupta Maurya and the Greeks
- Anangpal Tomar and the Ghaznavids
- Ghiyasuddin Balban and the Mongols
- Akbar or Aurangzeb and Central Asia

There is an issue which is common to ALL these encounters and also applies to present-day India. Identify the issue.

- A. the defence of India's northwest frontier
- B. India's focus on trade deals in the Asian region
- C. communal violence involving Hindus and Muslims within India
- D. India's stance of non-interference in the internal affairs of other countries

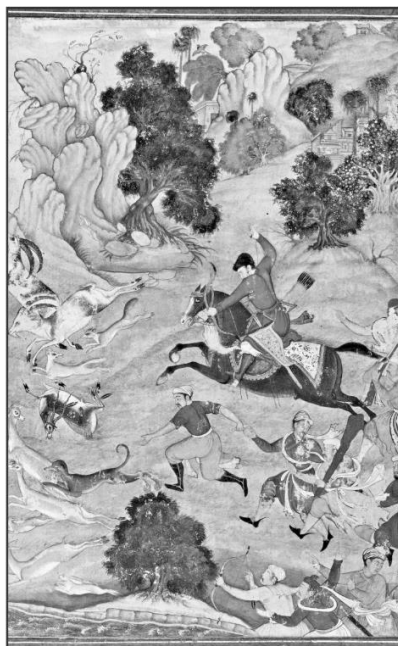
Q5. The historian Mark Zebrowski writes:

"Few Deccani paintings record historical events or realistically portray their subjects as Mughal art does. Nor was there much interest in the thrills of the hunt, court ceremonial or Hindu ritual. Instead, princely portraits predominate, which aim to establish an emotional atmosphere. We are admitted into a private world of feeling...rarely do we see an army on the march. Reflection and thought triumph over dramatic action."

Which of these is most likely to be a Deccani painting that fits this description?



A



B



C



D

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -III

Grade 3

Mathematics

NAS LO: Compares numbers up to 999 based on their place values.

Q1. In which of the following numbers is the place value of the digit '3' the greatest?

- A. 136 B. 239 C. 301 D. 743

NAS LO: Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction.

Q2. The 42 children in Navya's class are seated in 7 rows in such a way that the number of children in each row is the same. How many children are seated in the FIRST row?

- A. 5 B. 6 C. 7 D. 8

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q3. Which is more: 2 km or 2000 m?

- A. 2 km B. 2000 m C. Both are equal D. Can't say

NAS LO: Analyses and applies an appropriate number operation in the situation/ context.

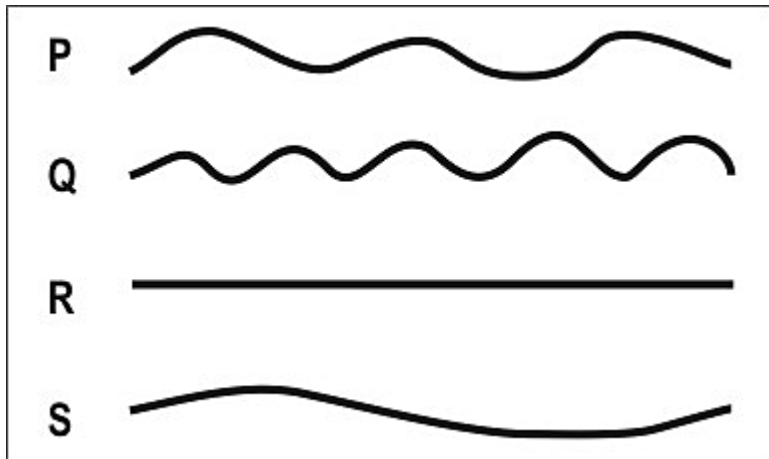
Q4. The cost of this teddy bear is Rs 55. How many 5-rupee coins will Nisha need to buy this teddy bear?



- A. 5 B. 11 C. 55 D. 275

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q5. Which of the following ribbons is the longest?



A. P

B. Q

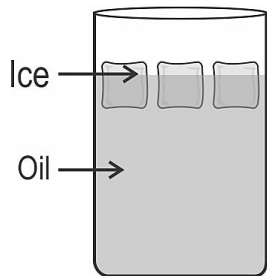
C. R

D. S

Environmental Science

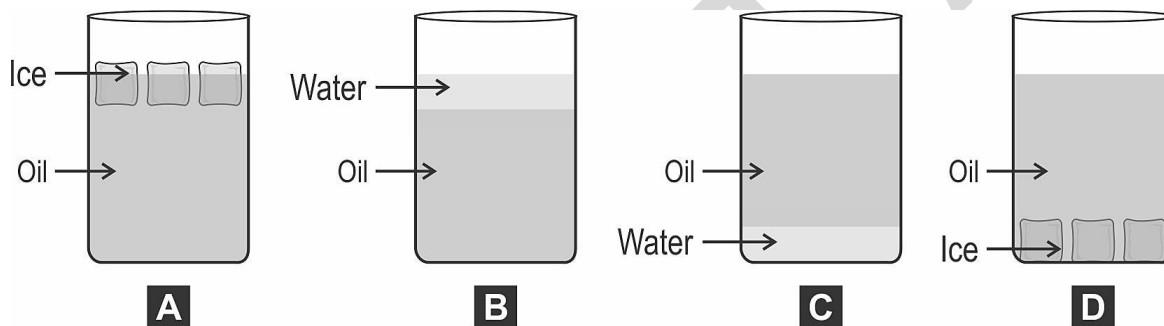
NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

Q1. Riya has a container with ice cubes floating in castor oil kept in a room. She knows that castor oil floats on water.



Container

How will the container look after an hour?



NAS LO: Groups objects, birds, animals, features, activities according to differences/similarities using different senses. (e.g. appearance/place of living/food/movement/likes-dislikes/any other features)

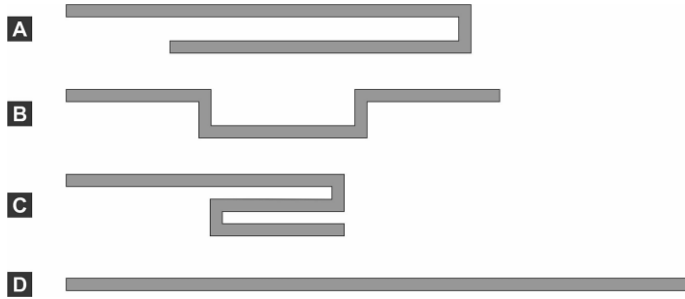
Q2. Anindita saw a vegetable which had many layers that could be removed one by one.

Which of the following could it be?

- A. carrot
- B. potato
- C. tomato
- D. cabbage

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

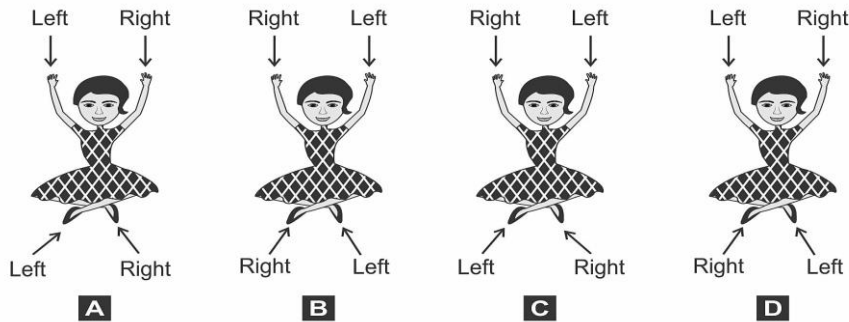
Q3. When made straight, which of these ribbons is the LONGEST?



NAS LO: Identifies direction, location of objects/places in simple maps using signs/symbols/verbally

Q4. Adila is sitting with her legs crossed.

In which of the following are Adila's left and right hands and legs correctly marked?

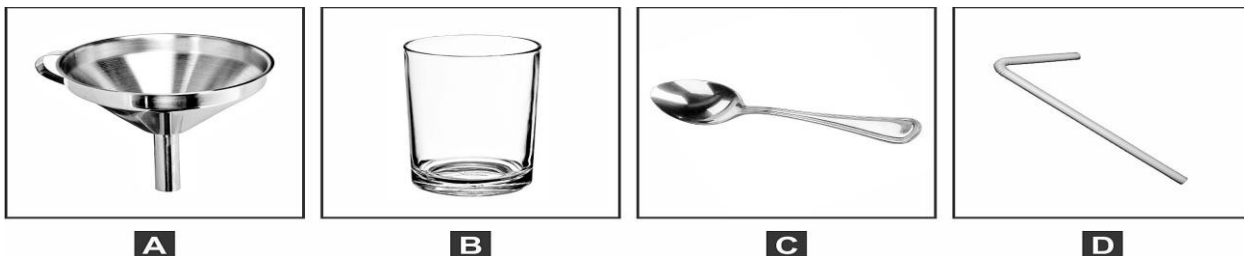


NAS LO: Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards etc.), places (types of houses/shelters, bus stand, petrol pump etc.) activities (works people do, cooking processes, etc.) at home/school/neighborhoods.

Q5. Jeet wants to fill rice grains in the bottle shown here.



Which of the following will be the BEST to use to fill the bottle without spilling any rice grains?



NAS/ SEAS/ SLAS PRACTICE TESTS

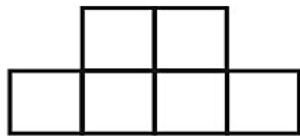
SET -III

Grade 6

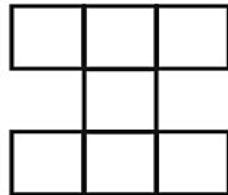
Mathematics

NAS LO: Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

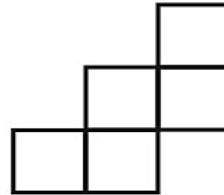
Q1. Which figure below has the SMALLEST area?



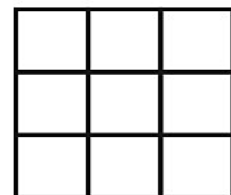
A



B



C



D

A. A

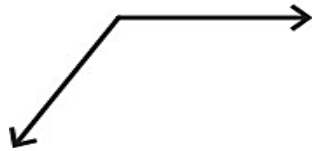
B. B

C. C

D. D

NAS LO: Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing.

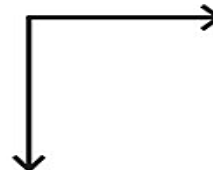
Q2. Which two angles have equal degree measures?



P



Q



R



S

A. P and Q

B. Q and R

C. P and R

D. None of the above.

NAS LO: Converts fractions into decimals and vice versa, and compare them.

Q3. Which of the given options are NOT equivalent decimals?

A. 1.23 and 1.230

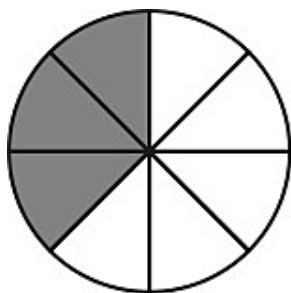
B. 3.241 and 03.241

C. 0.0914 and 0.914

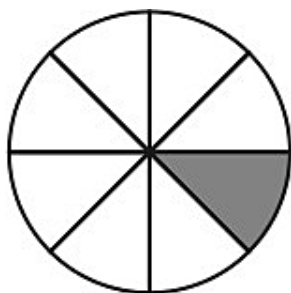
D. 0.0405 and 0.04050

NAS LO: Compares fractions and performs simple operations on fractions.

Q4. The two models below are each shaded to show a fraction.

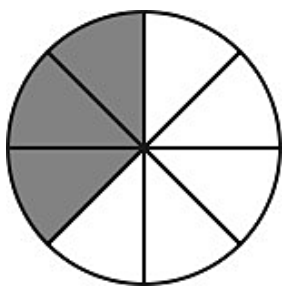


Circle 1

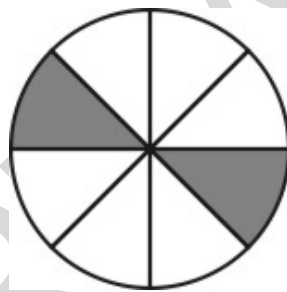


Circle 2

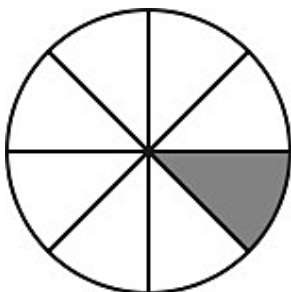
One fraction is subtracted from the other. Which model is shaded to show the difference?



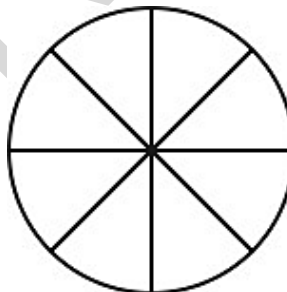
A.



B.



C.



D.

NAS LO: Reads and writes numbers bigger than 1000 being used in her/his surroundings.

Q5. Which of the following is "two thousand five"?

A. 20005

B. 5002

C. 2500

D. 2005

Environmental Science

NAS LO: Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc) of animals and their responses to light, sound, food, etc.

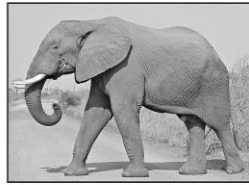
Q1. The picture shows a squirrel holding its food while eating.



Which of the following animals can also hold its food in a SIMILAR way while eating?



Cow
A



Elephant
B



Goat
C



Monkey
D

NAS LO: Groups objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.

Q2. While walking around in a garden, Sana grouped the plants that she saw into two groups as shown below.

Plants that were taller than her (Group P)	Plants that were shorter than her (Group Q)
Banana	Tulsi
Rose	Coconut
Jackfruit	Mango
Gulmohar	Ginger

Which of the following is TRUE based on the table?

- A. All the plants in group P are trees.
- B. Only the plants in group Q have flowers.
- C. Some plants in group Q are not fully grown.
- D. Only the plants in group P will produce fruits.

NAS LO: Explains the super senses and unusual features (sight, smell, hear, sleep, sound, etc) of animals and their responses to light, sound, food, etc.

Q3. A nuthatch is a bird that can run down a tree trunk head first, as shown in the picture.



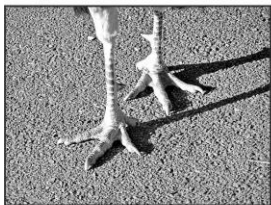
Which of the following is MOST LIKELY to be the feet of a nuthatch?



A



B



C



D

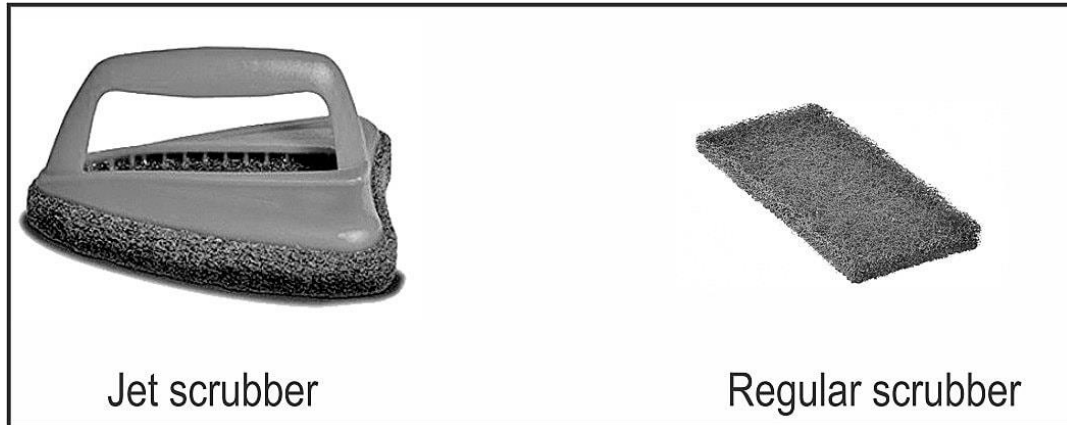
NAS LO: Explains the role and functions of different institutions in daily life (Bank, Panchayat, Cooperatives, police station etc)

Q4. In which of the following places do gram panchayats work?

- A. cities
- B. villages
- C. metro cities
- D. state capitals

NAS LO: Suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/saving resources.

Q5. The picture shows a 'jet scrubber' and a 'regular scrubber' which are used for cleaning stains on the floor.



What could be the DISADVANTAGE of using a jet scrubber as compared to a regular scrubber?

- A.** More water is required for cleaning when using it.
- B.** More soap is required for cleaning when using it.
- C.** The hands get dirty while using it for scrubbing.
- D.** It creates more waste when it is thrown away.

NAS/ SEAS/ SLAS PRACTICE TESTS

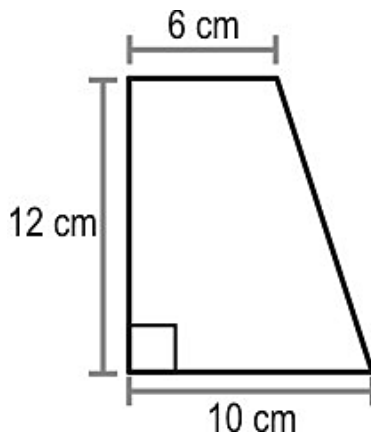
SET -III

Grade 9

Mathematics

NAS LO: Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc.

Q1. What is the area of the trapezium shown below?



- A. 66 cm^2 B. 96 cm^2 C. 120 cm^2 D. 192 cm^2

NAS LO: Adds/subtracts algebraic expressions.

Q2. $2t - 1 = 5 - t$. What is t ?

- A. $4/3$ B. 2 C. 4 D. 6

NAS LO: Find surface area and volume of cuboidal and cylindrical object

Q3. A cylinder whose volume is 1540 cm^3 has a height of 5 cm. What is the area of its base?

- A. 38 cm^2 B. 49 cm^2 C. 308 cm^2 D. 616 cm^2

NAS LO: Solves problems related to daily life situations involving rational numbers

Q4. Mr. Murthy deposits Rs 60,000 in a bank at 10% interest compounded half-yearly.

How much INTEREST would he earn in one year?

A. Rs 6,000

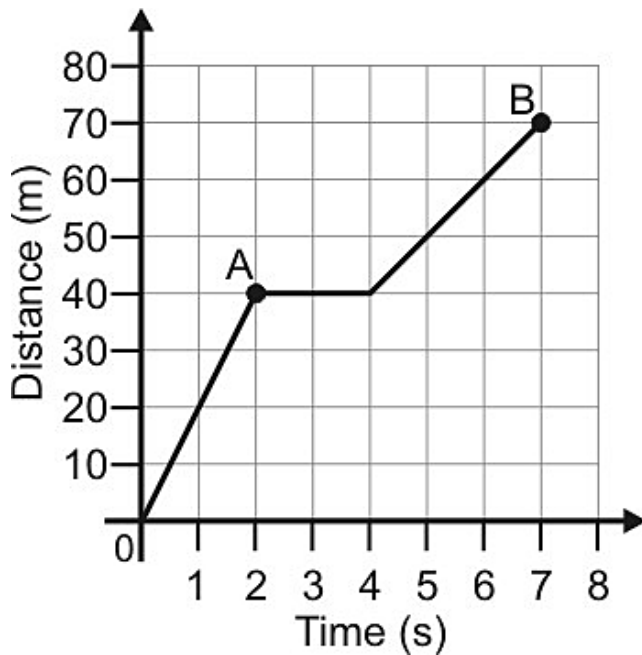
B. Rs 6,150

C. Rs 12,600

D. Rs 66,150

NAS LO: Draws and interprets bar charts and pie charts

Q5. Shown below is a distance-time graph of the motion of a car.



What is the distance traveled by the car in the time interval AB?

A. 30 m

B. 50 m

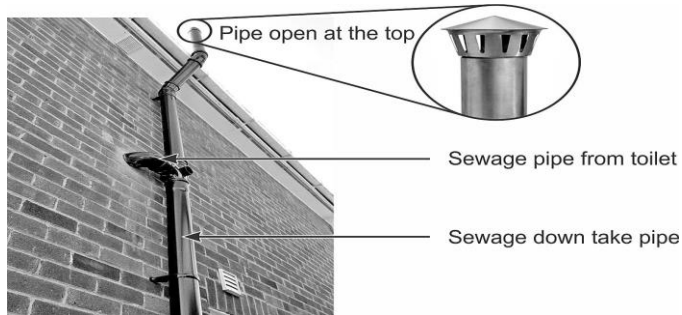
C. 70 m

D. 90 m

Science

NAS LO: Relates process and phenomenon with causes.

Q1. The picture here shows the sewage pipes that carry the sewage from the toilets to the drains in a building.

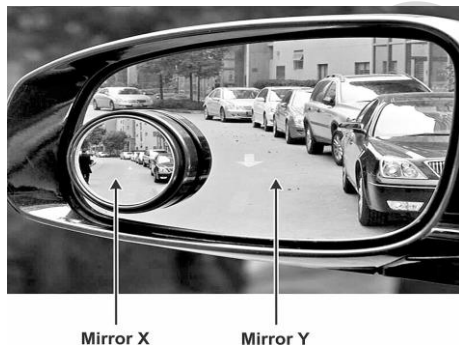


What could be one of the functions of the opening at the top of the pipe?

- A. It prevents sewage flowing backwards into the toilet.
- B. It allows gases formed in the sewage to escape.
- C. It collects rainwater to clean the drain.
- D. It makes the sewage flow down faster.

NAS LO: Applies learning of scientific concepts in day-to-day life.

Q2. Observe the picture shown below.

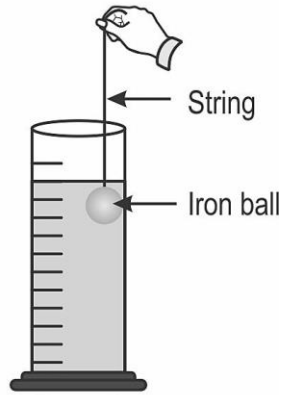
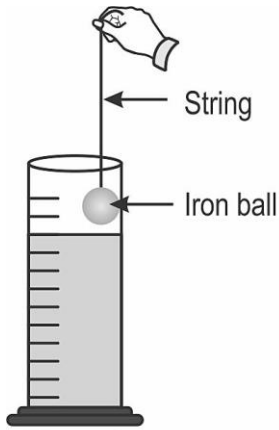


Which of the following correctly identifies the two mirrors shown in the above picture?

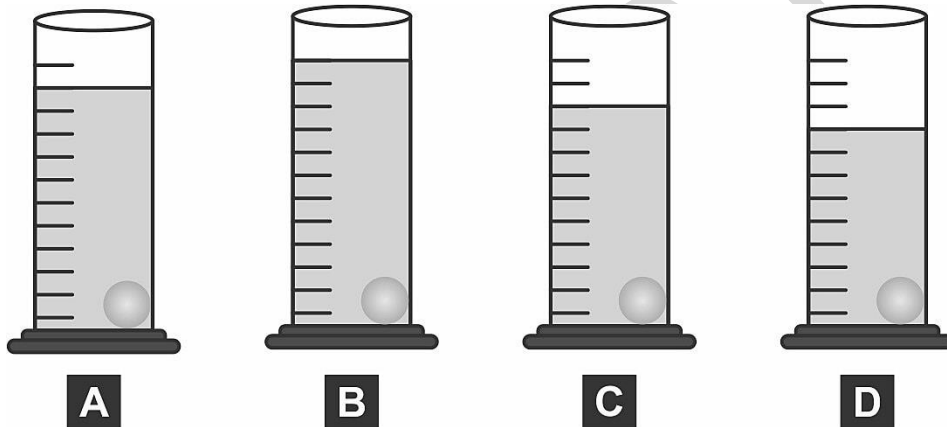
Option	Mirror X	Mirror Y
A	Convex	Concave
B	Convex	Convex
C	Concave	Concave
D	Concave	Convex

NAS LO: Conducts simple investigation to seek answers to queries

Q3. An iron ball suspended by a very thin string is immersed in a cylinder of water as shown in Figures 1 and 2.

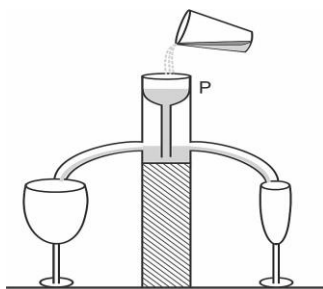


Which of the following shows the level of water when the string is cut and the iron ball sinks to the bottom of the cylinder?

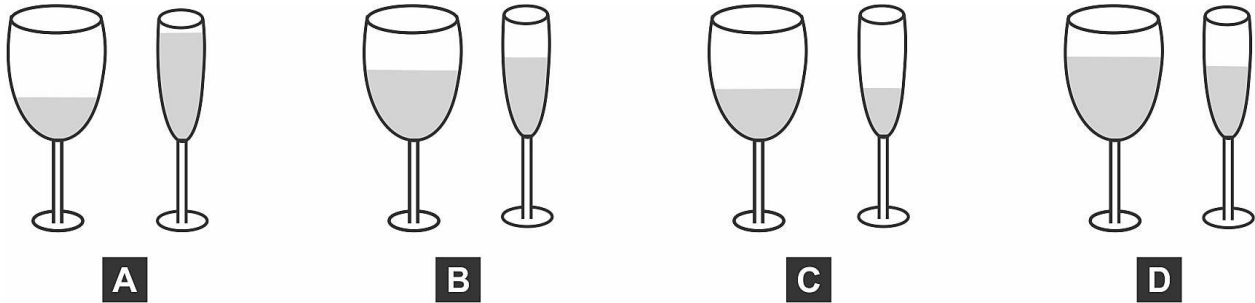


NAS LO: Conducts simple investigation to seek answers to queries.

Q4. A device made of glass that is used to pour liquids into glasses is shown in Figure 1.



Which of the following correctly shows the levels of the liquid in the two glasses after some time?



NAS LO: Explains processes and phenomenon.

Q5. Which of the following is TRUE about the process of respiration?

- A. It always requires oxygen.
- B. It takes place only at night in plants.
- C. It is the taking in of air by an organism.
- D. It provides usable energy to an organism.

Social Science

NAS LO: Distinguishes the modern period from the medieval and the ancient periods through the use of sources.

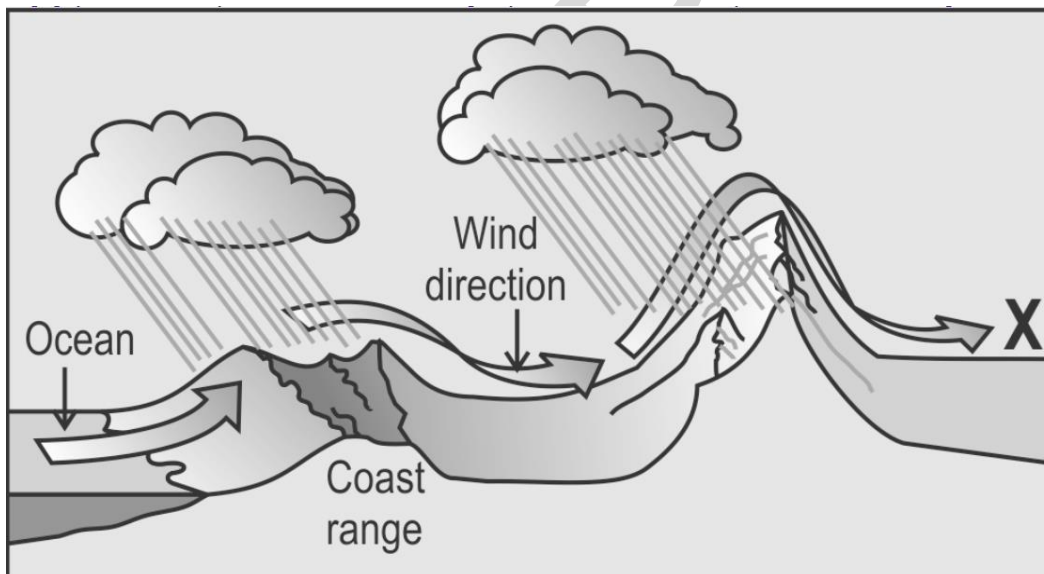
Q1. Rajatarangini, a chronicle of the kings of Kashmir, was written by the Kashmiri historian Kalhana in the 12th century CE. Though Kalhana's work provides valuable information, many historians think that it may not be fully reliable.

Which of the following BEST supports their view?

- A. He wrote the book in verses like an epic poem.
- B. He says that the reign of a certain king lasted for 300 years.
- C. He referred to a variety of primary sources to write his historical account.
- D. He got information from his father and uncle who were both part of the king's court.

NAS LO: Describes formation of landforms due to various factors.

Q2. Judging by the wind and rain patterns, which one of the following are you MOST LIKELY to find in the place marked as X on the image?



- A. a very arid region
- B. a highly humid region
- C. a tropical region with rainforests
- D. a region with strong coastal breezes

NAS LO: Explains the significance of equality in democracy.

Q3. Consider the following situation:

Two lawyers apply for a job in a law firm. One is better qualified but comes from a poor family. The other is less qualified but comes from a wealthy family, and would bring more wealthy clients, thus increasing the firm's profits. The wealthy applicant is chosen, because hiring her might increase the firm's expected profits more than if they hired the other.

What does this BEST indicate about the right to equality?

- A. It is a well-defined legal right, so it is easy to follow the law and enforce it.
- B. It guarantees that people get to positions of power due to merit and not inherited status.
- C. It is a complex principle and sometimes it can be difficult to decide what is right and wrong.
- D. It is a law that ensures that people from all classes get jobs that match their talent and abilities.

NAS LO: Distinguishes the modern period from the medieval and the ancient periods through the use of sources.

Q4. A primary source of history is an original object or document – first-hand information received directly from the original source. A secondary source of history is information that is based on primary sources.

Which of the following is a secondary source of information?

- A. Man-made artifacts from the past like stone tools, weapons, jewellery, clothing etc.
- B. The documentary The Barbarian West which traces the origins of western culture in Greece and Rome.
- C. The book Mein Kampf (My Struggle) by Adolf Hitler which describes his ideology and plans for Germany.
- D. Measurements of air and sea surface temperatures over the last decade from weather monitoring stations.

NAS LO: Describes the process of election to the legislative assembly.

Q5. In India, who among the following has similar powers and functions at the state level as that of the President at the union level?

- A. the Governors
- B. the Chief Ministers
- C. the Municipal Commissioners
- D. the Members of Legislative Assemblies

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -IV

Grade 3

Mathematics

NAS LO: Reads and writes numbers up to 999 using place value.

Q1. Which of the following is the same as 307?

A. $30 + 7$

B. $300 + 70$

C. $3 + 0 + 7$

D. $100 + 100 + 100 + 7$

NAS LO: Extends patterns in simple shapes and numbers.

Q2. Which will be the next two numbers in the number pattern shown below?

1, 4, 7, 10, 13, ____, ____

A. 14 and 15

B. 15 and 19

C. 16 and 19

D. 16 and 20

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q3. Which of the following is usually measured in centimeters?

A. the length of a car

B. the length of a pencil

C. the thickness of a sheet of paper

D. the distance between New Delhi and Mumbai

NAS LO: Analyses and applies an appropriate number operation in the situation/context.

Q4. Which of the following is the same as 2×71 ?

A. 271

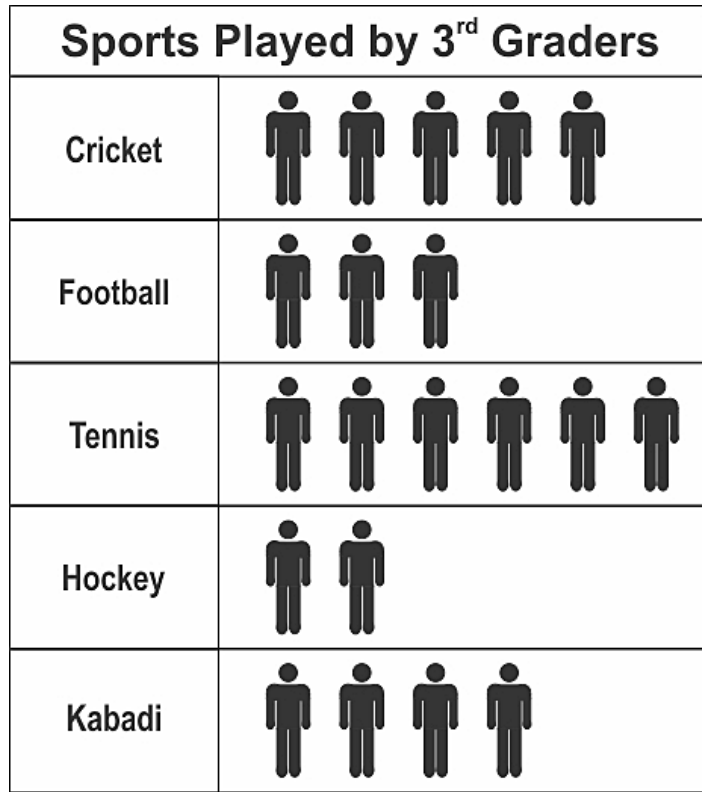
B. $2 + 71$


C. $71 + 71$

D. 71×71

NAS LO: Records data using tally marks, represents pictorially and draws.

Q5. Look at the pictograph.



Key :  = 1 student

It shows the number of students of a class who play different sports.

How many MORE students play cricket than kabadi?

A. 1

B. 2

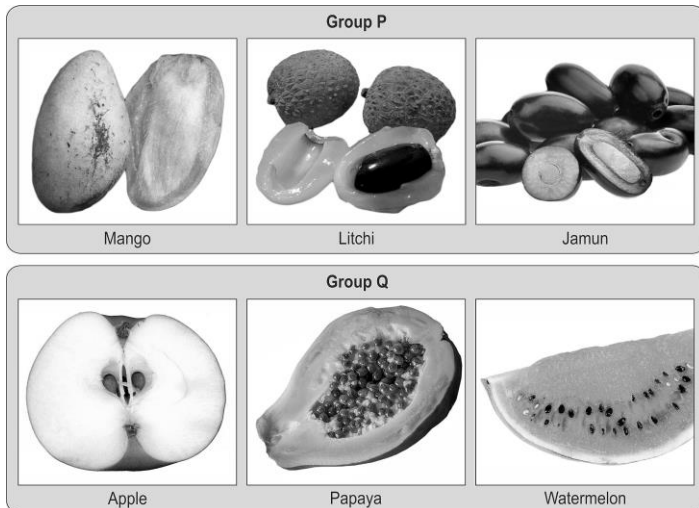
C. 3

D. 4

Environmental Science

NAS LO: Groups objects, birds, animals, features, activities according to differences/similarities using different senses. (e.g. appearance/place of living/food/movement/likes-dislikes/any other features)

Q1. Neha made two groups of fruits by looking at their seeds.



Into which group should she put lemon and guava?

- A. lemon in Group P and guava in Group Q
- B. lemon in Group Q and guava in Group P
- C. both in Group P
- D. both in group Q

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

Q2. Which of these is made from something that is obtained from a living thing?



Ice cubes

A



Clay pots

B



Coins

C



Cotton shirt

D

NAS LO: Identifies objects, signs (vessels, stoves, transport, means of communication, transport, signboards etc.), places (types of houses/shelters, bus stand, petrol pump etc.) activities (works people do, cooking processes, etc.) at home/school/neighborhoods.

Q3. What does this road sign mean?



- A. There is a school nearby.
- B. There is a hospital nearby.
- C. There is a running track nearby.
- D. There is a road crossing nearby.

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units

Q4. Hussain put the things shown below in different glasses of water and stirred them. After an hour, which one of them will still be seen in the glass?



Salt

A



Sugar cubes

B



Glass beads

C

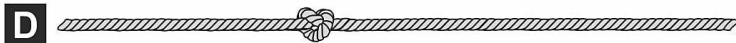
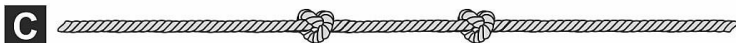


Ice cubes

D

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units

Q5. After opening the knots, which rope will be the LONGEST?



NAS/ SEAS/ SLAS PRACTICE TESTS

SET -IV

Grade 6

Mathematics

NAS LO: Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

Q1. The side of a floor which is in the shape of a square is 20 cm long. Ram wants to tile the floor with square tiles of side 1 cm. How many tiles will he need?

- A. 10 tiles B. 20 tiles C. 200 tiles D. 400 tiles

NAS LO: Converts fractions into decimals and vice versa.

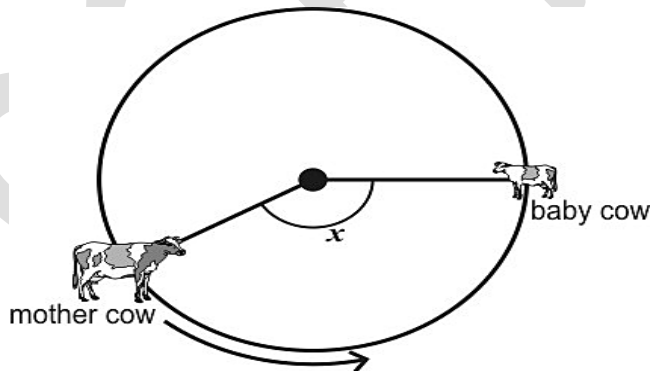
Q2. $\square \times 10 = 66.6$

Which of the following numbers will fill in the box above?

- A. 0.666 B. 6.66 C. 666 D. 6660

NAS LO: Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing.

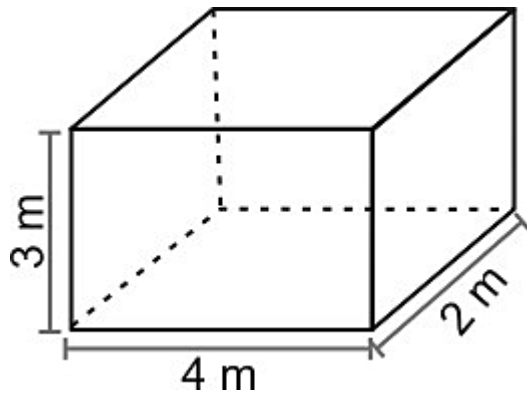
Q3. A mother cow who is tied to a pole walks along the boundary of a circle to reach her baby cow. The baby cow does not move.



- A. equal to 90 degrees
B. less than 90 degrees
C. more than 90 degrees
D. cannot say for sure without measuring the angle

NAS LO: Estimates the volume of a solid body in known units.

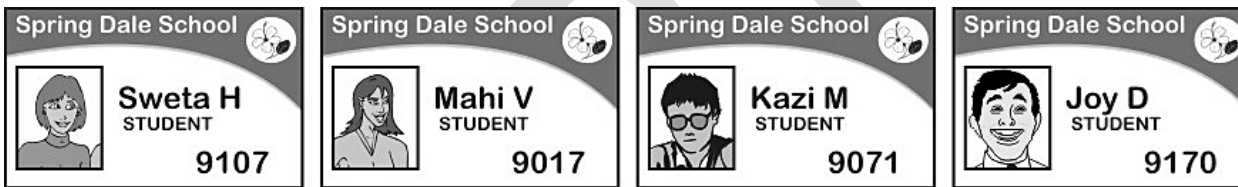
Q4. What is the volume of the cuboid below?



- A. 9 cubic m B. 24 cubic m C. 36 cubic m D. 52 cubic m

NAS LO: Applies operations of numbers in daily life situations.

Q5. The cards shown below has roll numbers of 4 students written on it.



Arrange the four cards starting from the SMALLEST roll number to the LARGEST roll number.

Whose card will be in THIRD place from left in this arrangement?

- A. Sweta's B. Mahi's C. Joy's D. Kazi's

Environmental Science

NAS LO: Suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/saving resources (land, fuels, forests, etc.) and shows sensitivity for the disadvantaged/deprived..

Q1. Look at the poster shown here.



Which of the following best describes the message of the poster?

- A. Use less water for washing.
- B. Close taps tightly and save water.
- C. Dripping water contains more germs.
- D. Kill germs in tap water before drinking.

NAS LO: Records observations/experiences/information in an organised manner (e.g. in tables/ sketches/ bar graphs/ pie charts) and predicts patterns in activities/phenomena (e.g. floating, sinking, mixing, evaporation, germination, spoilage) to establish relation between cause and effect.

Q2. Shown here are how Alia and Biju hung out a few kitchen clothes on the clothes line after washing.



Alia's method



Biju's method

What advantage would Biju's method have over Alia's?

- A. The clothes dry faster.
- B. The clothes can be hung up faster.
- C. The clothes take up less space on the clothes line.
- D. The clothes will not be blown away if there is a breeze.

NAS LO: Groups objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.

Q3. Look at the list below.

Tiger	Mango tree	Fish	Mustard seed
--------------	-------------------	-------------	---------------------

Which of the following is a suitable title for the above list?

- A. things that are living
- B. things that are found only on land
- C. things that are eaten regularly by humans
- D. things that move from one place to another

NAS LO: Suggests ways for hygiene, health, managing waste, disaster/emergency situations and protecting/saving resources (land, fuels, forests, etc.) and shows sensitivity for the disadvantaged/deprived.

Q4. Here are some activities that need to be done to maintain good health and a clean body. One of them needs to be done once in two weeks. Which one?

- A. trimming nails
- B. washing hands
- C. eating good food
- D. getting teeth checked by the dentist

NAS LO: Guesses (properties, conditions of phenomena), estimates spatial quantities (distance, area, volume, weight etc.) and time in simple standard units and verifies using simple tools/set ups. (e.g. floating/sinking/mixing/evaporation /germination /spoilage /breathing /taste)

Q5. Sahiti looked at the clock on her wall and saw the time as shown.



What additional information does she need to know to tell the time correctly?

- A. whether it is summer or winter
- B. whether it is morning or evening
- C. whether the place where she stays is in the north or the south of the country
- D. No additional information is needed. Looking at the clock is enough.

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -IV

Grade 9

Mathematics

NAS LO: Finds surface area and volume of cuboidal and cylindrical object.

Q1. The length, breadth and height of a cuboid are doubled. What happens to its surface area?

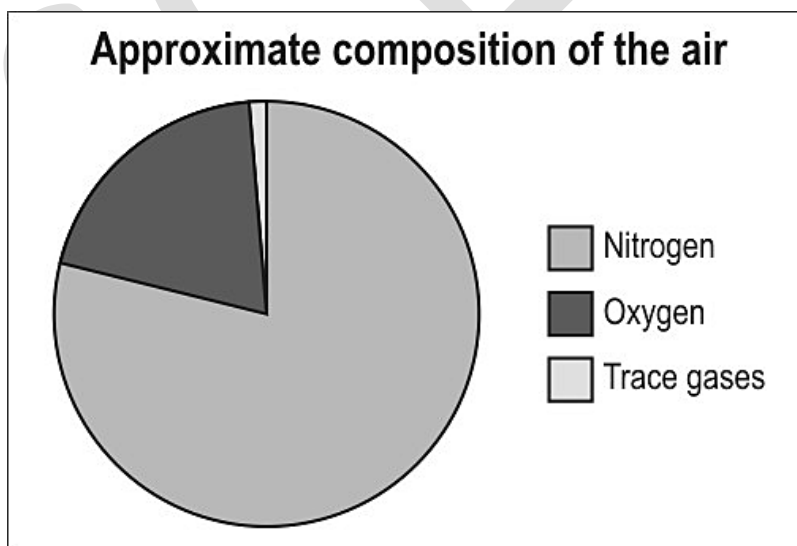
- A. It is doubled.
- B. It becomes four times.
- C. It becomes eight times.
- D. Nothing can be said without knowing the dimensions of the cuboid.

NAS LO: Adds/subtracts algebraic expressions.

Q2. Which of the following is the same as the equation $x + 5y = 4x - 3y$?

- A. $3x = 2y$
- B. $3x = 8y$
- C. $5x = 2y$
- D. $6x = y$

The areas shaded in the chart below represent the fraction of each constituent of air.



Study the chart and answer questions that follow.

NAS LO: Draws and interprets bar charts and pie charts.

Q3. Based on the chart, if the amount of oxygen in the air increased, the fraction of which of these gases in the air will change?

- A. only oxygen
- B. only oxygen and nitrogen
- C. only oxygen and trace gases
- D. all - oxygen, nitrogen and trace gases

NAS LO: Draws and interprets bar charts and pie charts.

Q4. Based on the chart, approximately what fraction of the air is oxygen?

- A. $\frac{1}{5}$
- B. $\frac{1}{4}$
- C. $\frac{1}{3}$
- D. $\frac{1}{2}$

NAS LO: Solves problems related to conversion of percentages to fractions and decimals to vice-versa.

**Q5. Usha got a 45% discount when she bought a new jacket.
Which of the following is NOT equivalent to 45%?**

- A. $\frac{9}{20}$
- B. $\frac{4}{5}$
- C. 0.45
- D. $\frac{45}{100}$

Science

NAS LO: Explains processes and phenomenon.

Q1. Potatoes are being heated in a container of water. Given below are two of the processes that occur.

Process P - the container is heated

Process Q - the potatoes are boiled

Which of these correctly lists the type of change taking place during the two processes?

Option	Process P	Process Q
A	Physical	Physical
B	Chemical	Physical
C	Chemical	Chemical
D	Physical	Chemical

NAS LO: Conducts simple investigations to seek answers to queries

Q2. A solid Block P floats in water as shown in Figure 1. It is then cut into two pieces of unequal sizes as shown in Figure 2.

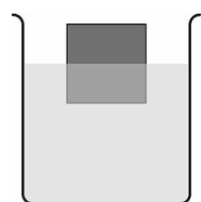


Figure 1

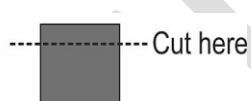
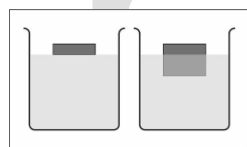
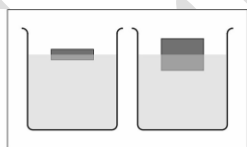


Figure 2

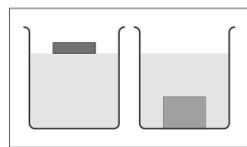
Which of these shows how the cut pieces will look when put in water?



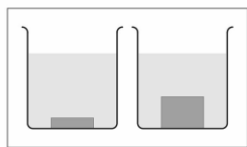
A



B



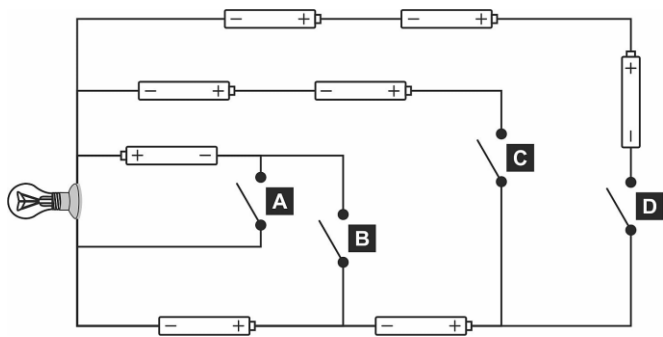
C



D

NAS LO: Applies learning of scientific concepts in day-to-day life

Q3. All the cells in the electric circuit shown below are identical. Closing one of the four switches shown makes the bulb glow the BRIGHTEST. Which one?



NAS LO: Conducts simple investigations to seek answers to queries

Q4. A bucket filled with some water is hanging in a train. Figure 1 shows how the bucket looks when the train is stationary on level ground.

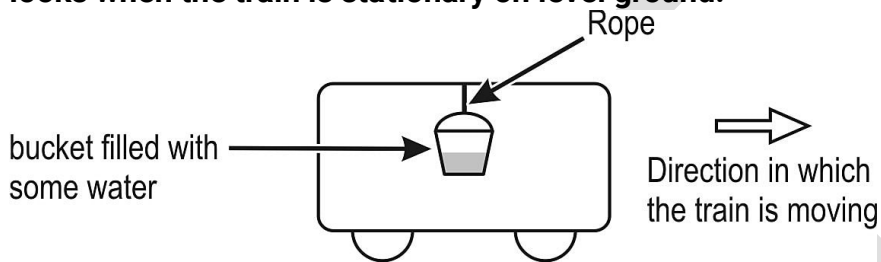
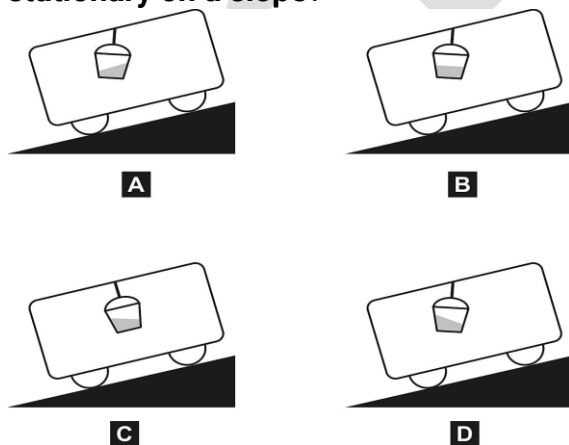


Figure 1

Which of the following correctly shows how the bucket with water will look when the train is stationary on a slope?



NAS LO: Applies learning of scientific concepts in day- to-day life

Q5. Mercury is a metal used in thermometers.

Which property makes mercury, and not other metals, suitable for use in thermometers?

- A. its high lustre
- B. its low melting point
- C. its resistance to rusting
- D. its electrical conductivity

SCERT AP

Social Science

NAS LO: Draws interrelationship between types of farming and development in different regions of the world.

Q1. The image shown here represents farming in Suru Valley, Ladakh. Farming in this harsh environment is made possible due to the exploitation of a local resource. Identify it.



- A. canal water drawn from the major river systems of North India
- B. monsoon rain that brings heavy rain for three months of a year
- C. melting of mountain glaciers during afternoon and evening hours
- D. the presence of a large number of oases in the terrain of Ladakh

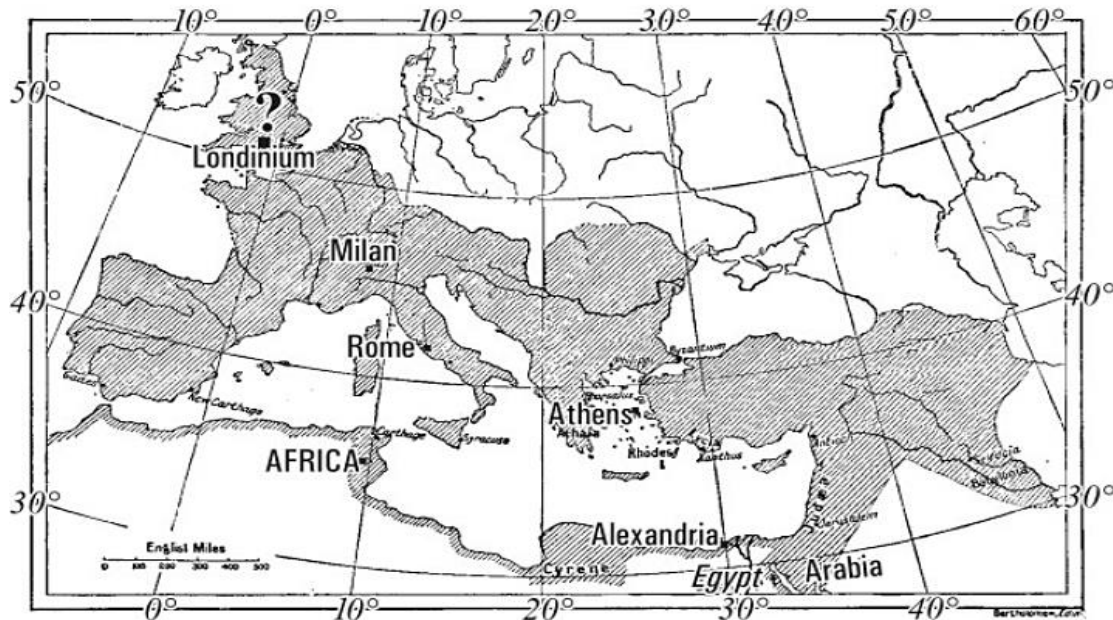
NAS LO: Explains the functioning of media with appropriate examples from newspapers

Q2. Which of the following is an example of censorship?

- A. national newspapers ignoring local and ordinary issues
- B. governments concealing military bases and power plants on maps
- C. politicians arguing that their point of view did not get enough media coverage
- D. local authorities installing cameras in cybercafés to monitor computer screens

NAS LO: Identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighboring countries on globe and the world map

Q3. The following question is based on this map of the Roman Empire.



Based only on this map, you can find out _____.

- A. the political boundaries of the modern day country of Israel
- B. the approximate latitude and longitude of Alexandria
- C. the altitude (height) of Jerusalem above sea level
- D. trade routes that led to Rome

NAS LO: Analyses the issues related to caste, women, widow remarriage, child marriage, social reforms and the laws and policies of colonial administration towards these issues

Q4. The following question is based on a historical personality.

One of the following people had established the observance of eleven vows. This was meant to be a guide for the "inmates" of the ashram and a part of his life and message.

These eleven vows were: truth, non-violence, celibacy, control of palate, non-stealing, non-possession, swadeshi, fearlessness, removal of untouchability, equality of religions and physical labour.

Most of these vows had deep connection with _____.

- A. social reforms in India
- B. the spread of Indian culture overseas
- C. combining all religions into one religion
- D. the revival of Vedic customs and tradition

NAS LO: Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation

Q5. Some fundamental rights apply only to citizens of India, while some rights apply to persons of any nationality on Indian soil.

Which of the following is a fundamental right that is likely to apply ONLY to citizens of India?

- A. equality before law
- B. the right to freedom and liberty
- C. prohibition of forced labour in factories
- D. equality of opportunity in matters of public employment

SCERT AP

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -V

Grade 3

Mathematics

NAS LO: Compares numbers up to 999 based on their place values.

Q1. Which of these is the LARGEST number?

A. 918

B. 189

C. 981

D. 891

NAS LO: Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction.

Q2. Gunjan bought some packets of toffees.

Each packet had 2 toffees as shown in the picture below.



She has a total of 10 toffees. How many packets of toffees did she buy?

A. 2

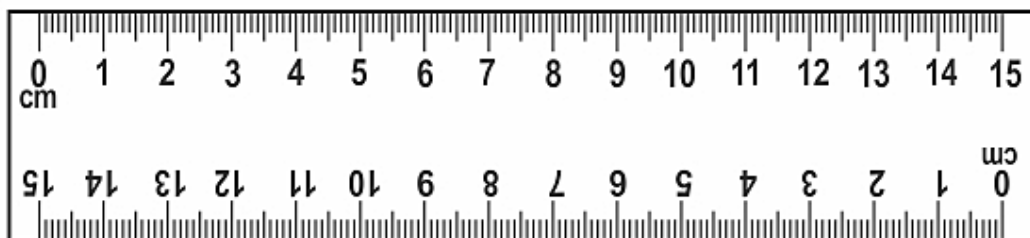
B. 5

C. 12

D. 20

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q3. The length of the pen shown below is:



A. 8 cm

B. 9 cm

C. 16 cm

D. 8 m

NAS LO: Analyses and applies an appropriate number operation in the situation/ context.

Q4. Sheela and her friends went to the zoo. Each of them had to pay Rs 5 to enter the zoo.



They paid Rs 40 in all. How many people went to the zoo?

A. 200

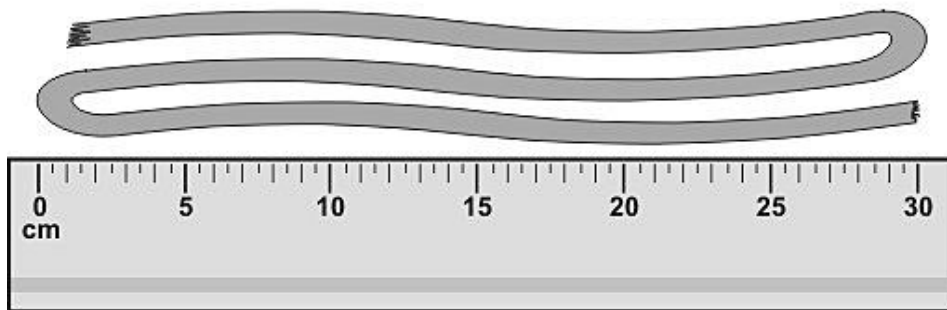
B. 40

C. 8

D. 5

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q5. Ekta bought a ribbon as shown here.



The ribbon is around?

A. 10 cm

B. 30 cm

C. 90 cm

D. Can't say

NAS LO: Describes need of food for people of different age groups, animals/birds, availability of food and water and use of water at home and surroundings.

Q5. Why is a sprinkler better than a hose pipe for watering grass in a lawn?



Sprinkler



Hose pipe

- A. It keeps the grass cooler.
- B. It keeps the grass cleaner.
- C. It makes the grass less wet.
- D. It spreads the water better on the grass.

SCERT AP

NAS/ SEAS/ SLAS PRACTICE TESTS

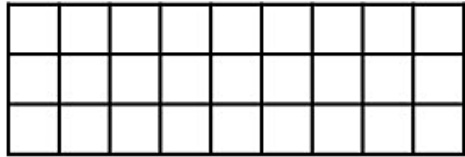
SET -V

Grade 6

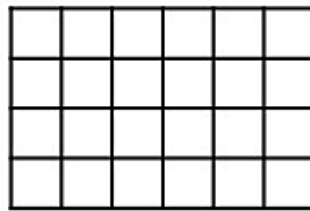
Mathematics

NAS LO: Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

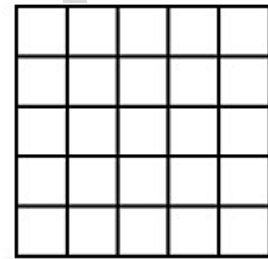
Q1. Shown below are 3 carpets.



Carpet A



Carpet B



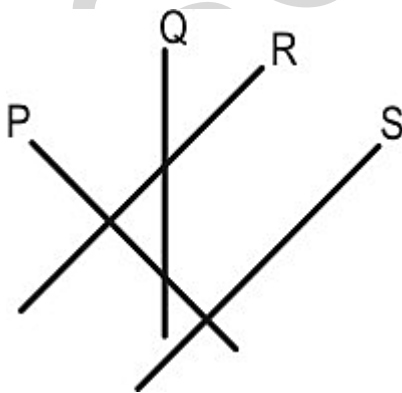
Carpet C

Which carpet is of GREATEST area?

- A. A B. B C. C D. All have the same area.

NAS LO: Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing.

Q2. Which of the following lines in the figure below are at right angles to each other?



- A. P and Q B. Q and R C. R and S D. P and S

NAS LO: Converts fractions into decimals and vice versa, and compare them.

Q3. Which of the following is the same as 78 tenths?

A. 0.78

B. 7.08

C. 7.8

D. 780

NAS LO: Compares fractions and performs simple operations on fractions.

Q4. What should come in the box to make the number sentence correct?

$$\frac{8}{10} - \boxed{} = \frac{3}{10}$$

A. 5

B. 11/10

C. 11/20

D. 5/10

NAS LO: Reads and writes numbers bigger than 1000 being used in her/his surroundings.

Q5. Which of the numbers in the box are between 5350 and 6350?

5299	5403
6099	6520

A. only 6099

B. only 5299 and 6520

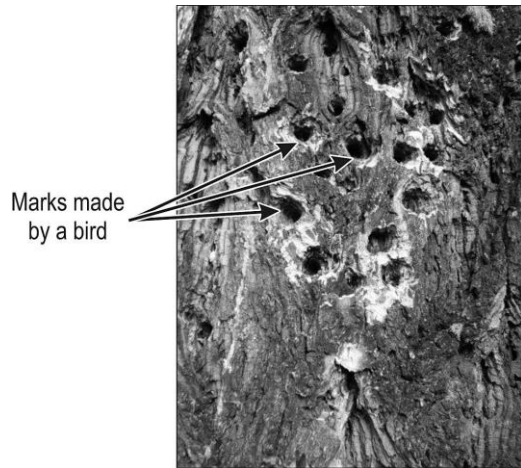
C. only 5403 and 6099

D. all - 5299, 5403, 6099 and 6520

Environmental Science

NAS LO: Groups objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.

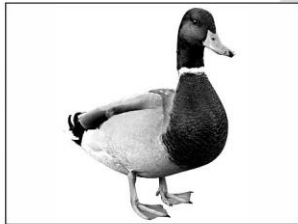
Q1. Shown below are the marks made by a bird on a tree trunk.



Which of the following birds is it likely to be?



A



B



C



D

NAS LO: Records observations/experiences/information in an organised manner (e.g. in tables/ sketches/ bar graphs/ pie charts) and predicts patterns in activities/phenomena (e.g. floating, sinking, mixing, evaporation, germination, spoilage) to establish relation between cause and effect.

Q2. Shown here is Riya's shadow at 8.30 AM.



She stood in the SAME position and checked her shadow at other times on the SAME day. Which of the following is MOST likely her shadow at 5 PM?



A



B



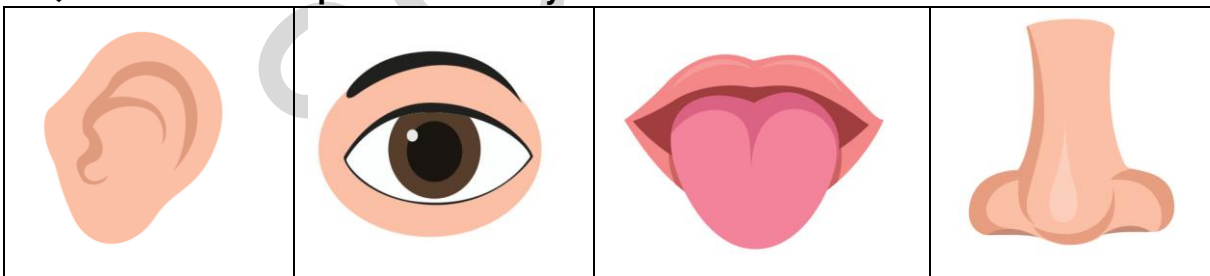
C



D

NAS LO: groups objects, materials, activities for features/properties such as shape, taste, colour, texture, sound, traits etc.

Q3. Here are some parts of the body.



Which of the following is common to ALL the parts listed above?

- A. They help in sensing things around us.
- B. They can be seen outside the body.
- C. They help in taking in food.
- D. They are found in pairs.

NAS LO: explains the role and functions of different institutions in daily life. (Bank, Panchayat, cooperatives, police station, etc.)

Q4. In which of the following situations will the Gram Panchayat step in to resolve?

- A. over flowing drains in a village
- B. to provide aid to an earthquake hit state
- C. attack on Indian soldiers by enemy soldiers
- D. country-wide protests against a government decision

NAS LO: explains the role and functions of different institutions in daily life. (Bank, Panchayat, cooperatives, police station, etc.)

**Q5. Alia wants to send money to her grandmother in the village.
Which of the following places does she need to visit for the same?**

- A. post office
- B. ration shop
- C. railway station
- D. police station

SCERT AP

NAS/ SEAS/ SLAS PRACTICE TESTS

SET -V

Grade 9

Mathematics

NAS LO: Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc.

Q1. What is the difference in perimeter between a square with a base of 4 cm and a circle with a diameter of 4 cm?

A. $8 - 2\pi$ cm

B. $16 - 2\pi$ cm

C. $16 - 4\pi$ cm

D. $16 - 8\pi$ cm

NAS LO: Adds/subtracts algebraic expressions.

Q2. If $a + 2b = 5$ and $c = 3$, what is the value of $a + 2(b + c)$?

A. 8

B. 11

C. 13

D. 16

NAS LO: Find surface area and volume of cuboidal and cylindrical object

Q3. A cuboidal box has dimensions 12 cm \times 16 cm \times 8 cm. How many cubes of side length 2 cm can the box hold?

A. 192

B. 384

C. 768

D. 1636

NAS LO: Solves problems related to daily life situations involving rational numbers

Q4. Doctors decide the dosage of medicine to be given to a patient, which is proportional to the body weight of the patient.

For a certain medicine, the dosage is fixed as 12 cc for 100 kg of body weight.

How many cc of this medicine should be given to a patient who weighs 175 kg?

A. 15 cc

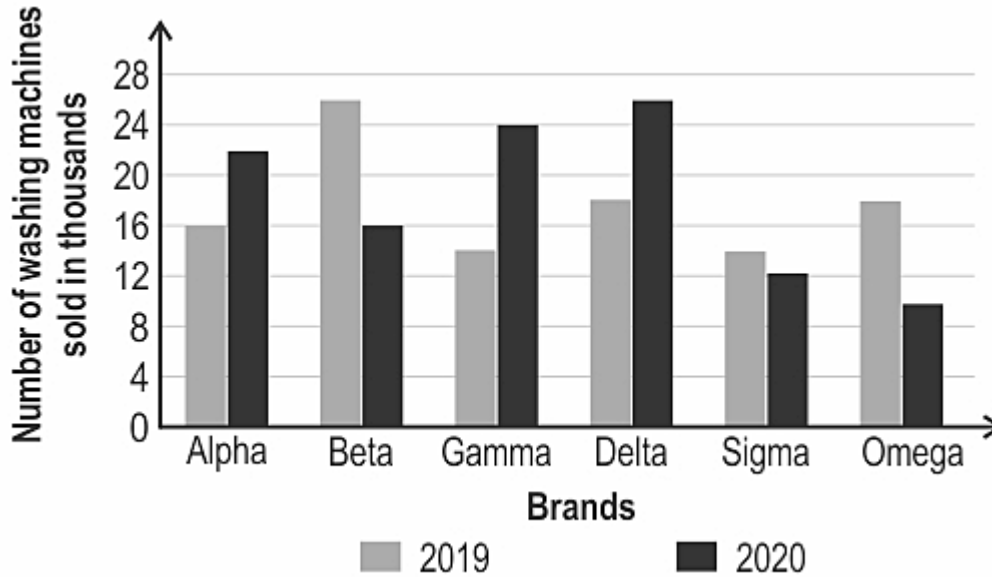
B. 18 cc

C. 21 cc

D. 24 cc

NAS LO: Draws and interprets bar charts and pie charts

Q5. The graph below shows the number of washing machines sold in two years by different Brands.



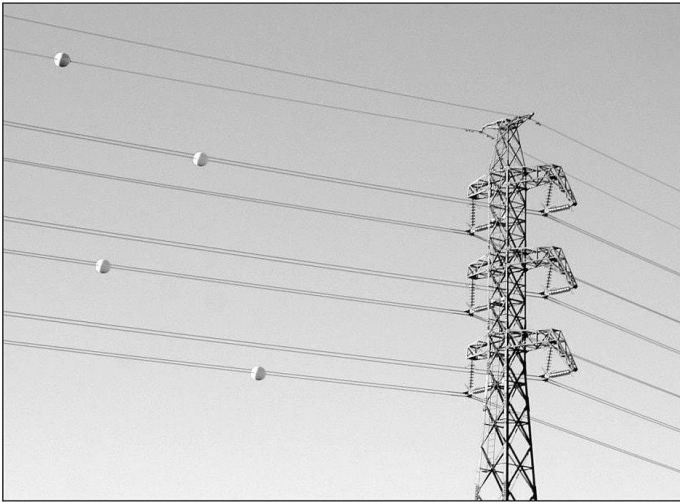
In which brand, has the sales improved the most from 2019 to 2020?

- A. Alpha B. Beta C. Gamma D. Delta**

Science

NAS LO: Applies learning of scientific concepts in day to day life.

Q1. The image below shows plastic balls attached to electric power lines. These balls are attached at equal distances along the length of the electric wires. Some of these balls are also designed to light up in the night.

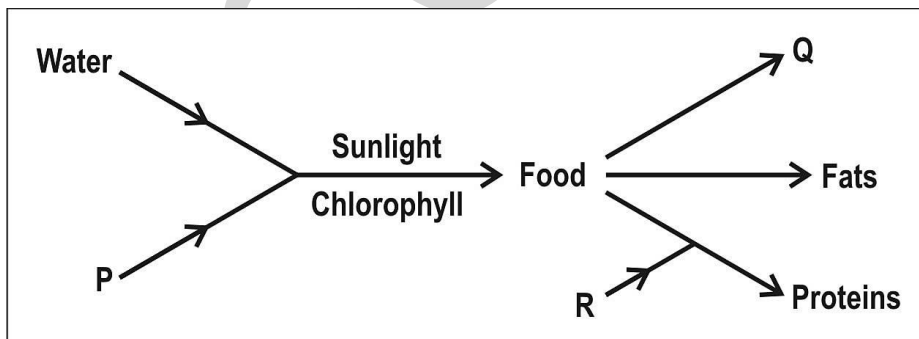


Which of these could be the purpose of these balls?

- A. to prevent birds from getting electrocuted
- B. to warn low-flying aircrafts of the power lines
- C. to prevent the power lines from getting entangled
- D. to make sure the power lines float in case of floods

NAS LO: Explains processes and phenomenon

Q2. Observe the representation of the process of food synthesis in plants.



Water and a substance P produce food, which is then used to synthesise substances like 'Q', fats and proteins.

What do the letters P, Q and R represent?

Option	P	Q	R
A	Minerals	Oxygen	Starch
B	Carbon dioxide	Starch	Nitrogenous substances
C	Oxygen	Minerals	Nitrogenous substances
D	Carbon dioxide	Oxygen	Minerals

NAS LO: Measures and calculate e.g., temperature, pulse rate, speed of moving objects, time period of a simple pendulum etc.

Q3. Two cars travel the SAME distance on a straight road. The diameter of the tyres and the speeds of the cars are given in the table here.

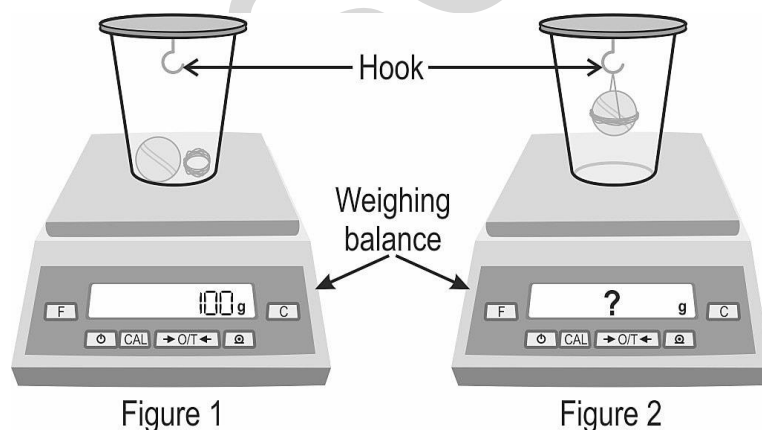
Car	Diameter of tyre	Car speed
P	42 cm	40 km/h
Q	57 cm	55 km/h

The tyres of which car will make MORE rotations while covering the distance, and why?

- A. Car P, because its tyres are smaller.
- B. Car Q, because its tyres are bigger.
- C. Car Q, because its speed is higher.
- D. Car P, because its speed is lower.

NAS LO: Conducts simple investigations to seek answers to queries

Q4. Inzaman took a container with a hook attached to its lid and placed a ball and a string in it. He checked the weight as shown in Figure 1. He then suspended the ball with the string from the hook and checked the weight again as shown in Figure 2.

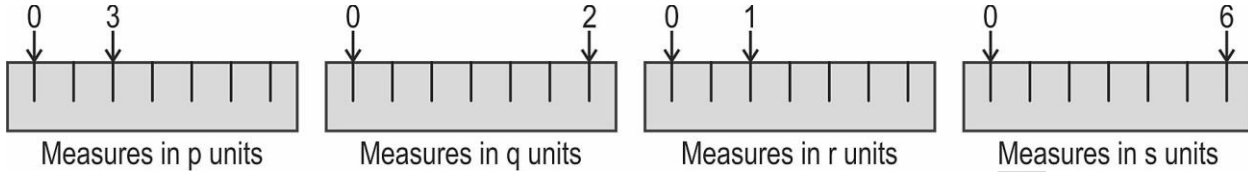


What will the weighing scale show in Figure 2?

- A. 40 g
- B. 90 g
- C. 100 g
- D. 110 g

NAS LO: Conducts simple investigations to seek answers to queries

Q5. Shown below are four scales that measure length in different units.



Which of the following is the greatest length?

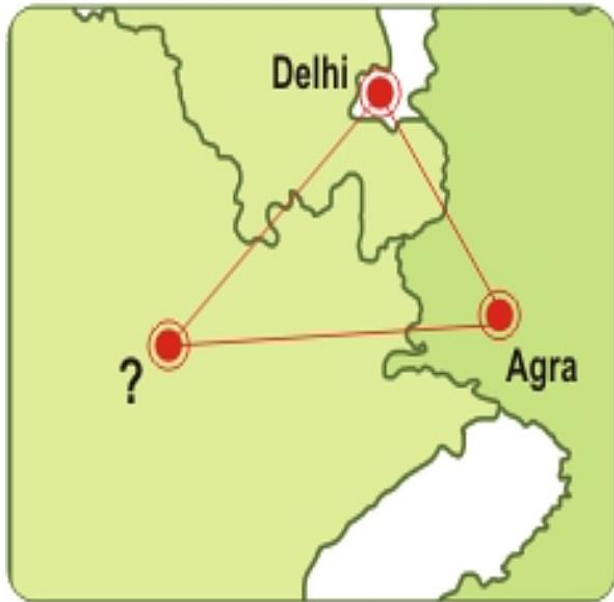
- A. 12 p units
- B. 12 q units
- C. 12 r units
- D. 12 s units

SCERT AI

Social Science

NAS LO: Locates important historical sites, places on an outline map of India

Q1. This is referred to as the "Golden Triangle" because of the popularity of tourist destinations. Only two of them have been named on the map.



- A. Jaipur
- B. Shimla
- C. Lucknow
- D. Dehradun

NAS LO: Describes the process of making a law. (e.g. Domestic Violence Act, RTI Act, RTE Act)

Q2. The Right to Information Act (RTI) is an Act of the Parliament of India. Under RTI, any citizen may request information from a public authority. However, some public authorities do not come under this Act. There are some kinds of information that public citizens are not allowed to access since it could pose a great risk to the country.

Which of these is most likely to be information that DOES NOT come under the RTI Act?

- A. expenditure of the state government
- B. defence research and development
- C. conservation of natural resources
- D. survey and exploration of gold

NAS LO: Explains the origin, nature and spread of the revolt of 1857 and the lessons learned from it

Q3. The following question is based on this information.

In June 1858, the Times correspondent William Howard Russell arrived in the ruins of Delhi. Russell was led to a cell and saw the frail 83-year-old man shown below who was accused by the British of being one of the masterminds of the most serious armed act of resistance to Western imperialism ever to be mounted anywhere in the world.



- A. Battle of Plassey
- B. Sepoy Mutiny
- C. Vellore Revolt
- D. Siege of Calcutta

NAS LO: Justifies judicious use of natural resources

Q4. In cities and urban areas, the population density (number of people per km) is high. Which of the following is likely to be a disadvantage of high human population density?

- A. rapid and increased use of natural resources in that area
- B. cheaper and increased access to various services in that area
- C. more workers to increase the growth of the economy in that area
- D. more people to pay taxes and increase the infrastructure in that area

NAS LO: Describes the functioning of rural and urban local government bodies in sectors like health and education

Q5. In most Indian villages and cities, who is in charge of operating and maintaining the infrastructure related to water supply and sanitation?

- A. individual citizens
- B. the central government
- C. panchayats and municipalities
- D. the State Legislative Assembly

NAS/ SEAS/ SLAS PRACTICE TESTS

SET - VI

Grade 3

Mathematics

NAS LO: Compares numbers up to 999 based on their place values.

Q1. 257 is the same as

A. $2 + 5 + 7$

B. $7 + 50 + 200$

C. $200 + 5 + 70$

D. $200 + 2 + 50$

NAS LO: Explains the meaning of division facts by equal grouping/sharing and finds it by repeated subtraction.

Q2. Zia wants to distribute 8 pencils equally among 4 of her friends. How many pencils will each of her friends get?

A. 2

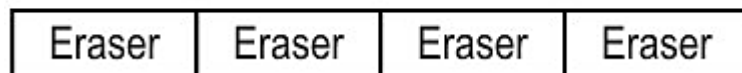
B. 4

C. 12

D. 32

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q3. Tina measures the length of her pencil using some erasers as shown. All the erasers are of the same length.



The pencil is _____ 4 erasers long.

A. equal to

B. more than

C. less than

D. (The length of the pencil can not be measured using erasers.)

NAS LO: Analyses and applies an appropriate number operation in the situation/ context.

Q4. Which of the following is equal to 76?

A. 6 more than 7

B. 4 less than 80

C. 6 less than 80

D. 7 more than 60

NAS LO: Estimates and measures length and distance using standard units like centimeters or meters & identifies relationships.

Q5. Which of the strings shown below is the LONGEST?

_____ string 1

_____ string 2

_____ string 3

A. string 1

B. string 2

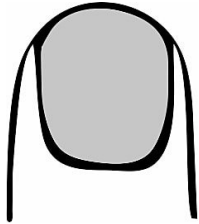
C. string 3

D. (All the 3 strings are of equal length)

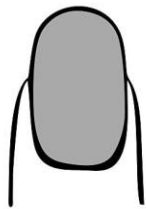
Environmental Science

NAS LO: NAS LO: Records observations, experiences, information on objects/activities/places visited in different ways and predicts patterns.

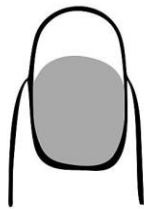
Q1. Nafisa puts nail polish on her fingernail as shown here.



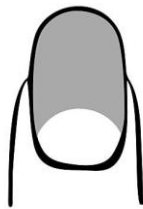
If she does not cut her fingernail, what would it look like after fifteen days?



A



B



C



D

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

Q2. Skylights are small holes in the roofs of houses that allow light to enter in. The holes are covered with a different material which stops rain from coming in but allows light to enter.

Which of these materials can be used to cover the holes?

- A. wood
- B. metal
- C. glass
- D. wire net

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

Q3. People use tissue paper to wipe their hands.



Tissue paper



Normal paper

What is the main reason for using tissue paper and not a normal sheet of paper?

- A. It easily soaks up water.
- B. It is easily folded.
- C. It is cleaner.
- D. It is lighter.

NAS LO: Guesses properties, estimates quantities of materials/activities in daily life and verifies using symbols/non-standard units.

Q4. Which of the following grows ABOVE the soil?



Onion

A



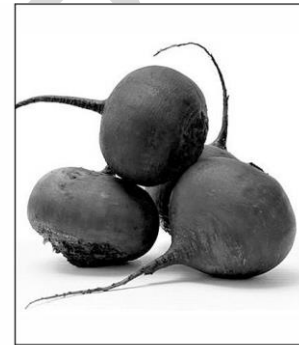
Peanuts

B



Coconut

C



Beetroot

D

NAS LO: NAS LO: Records observations, experiences, information on objects/activities/places visited in different ways and predicts patterns

Q5. Jagan drops a basketball from a height of 1 metre on to the floor and measures how high it bounces back after hitting the floor. Then he drops a tennis ball from the same height on to the same floor and also measures how high it bounces back.

What can he find out using only the measurements he made?

- A. which ball is heavier
- B. which ball bounces more
- C. which ball has more air inside
- D. which ball causes more damage to the floor

NAS/ SEAS/ SLAS PRACTICE TESTS

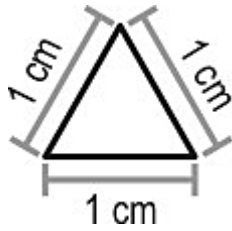
SET - VI

Grade 6

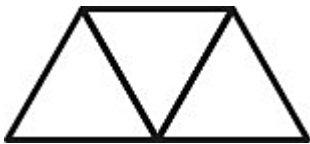
Mathematics

NAS LO: Explores the area and perimeter of simple geometrical shapes (triangle, rectangle, square) in terms of given shape as a unit.

Q1. Shown here is a triangular tile with sides 1 cm each.



Urva made a shape shown below using 3 such identical tiles.



What is the perimeter of the shape?

A. 3 cm

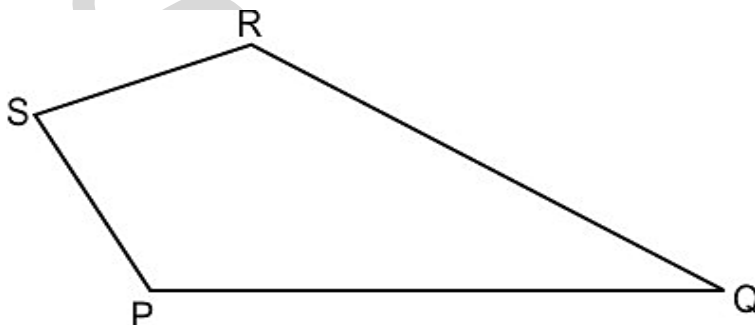
B. 5 cm

C. 7 cm

D. 9 cm

NAS LO: Classifies angles into right angle, acute angle, obtuse angle and represents the same by drawing and tracing.

Q2. Look at the figure given below.



What is the approximate measure of $\angle S$?

A. 30°

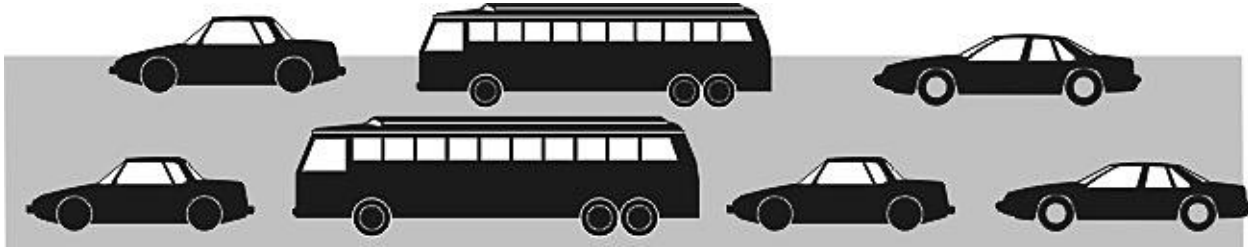
B. 80°

C. 105°

D. 120°

NAS LO: Identifies and forms equivalent fractions of a given fraction

Q3. What fraction of the vehicles in the picture below are buses?



A. $\frac{1}{2}$

B. $\frac{2}{5}$

C. $\frac{2}{7}$

D. $\frac{5}{7}$

NAS LO: Compares fractions and performs simple operations on fractions.

Q4.

$$\square + \frac{5}{8} = 1$$

What should come in the box to make the number sentence true?

A. $\frac{13}{8}$

B. $\frac{8}{5}$

C. $\frac{5}{8}$

D. $\frac{3}{8}$

NAS LO: Reads and writes numbers bigger than 1000 being used in her/his surroundings.

Q5. A city has five thousand sixty two public transport buses.

Which of the following represents the number of transport buses the city has?

A. 5620

B. 5260

C. 5062

D. 562

Environmental Science

NAS LO: Explains the role and functions of different institutions in daily life. (Bank, Panchayat, cooperatives, police station, etc.)

Q1. Reena lives in a small village in Assam. The road connecting her village to the nearby city is in a bad condition.

Which of the following local government agencies will be responsible for fixing this issue?

- A. Panchayat
- B. Municipal Council
- C. Town Municipality
- D. Municipal Corporation

NAS LO: Explains the role and functions of different institutions in daily life. (Bank, Panchayat, cooperatives, police station, etc.)

Q2. Fill in the blank.

Every Panchayat, as a rule, **MUST** have _____ among its elected members.

- A. a teenager
- B. an adult man
- C. a senior citizen
- D. an adult woman

NAS LO: Records observations/experiences/information in an organised manner (e.g. in tables/ sketches/ bar graphs/ pie charts) and predicts patterns in activities/phenomena (e.g. floating, sinking, mixing, evaporation, germination, spoilage) to establish relation between cause and effect.

Q3. Shown here is a plant called tillandsia or air plant. It does not need soil to grow and is often found growing on barks of other trees. Special structures on its leaves take in water, in the form of water vapour, from the air.

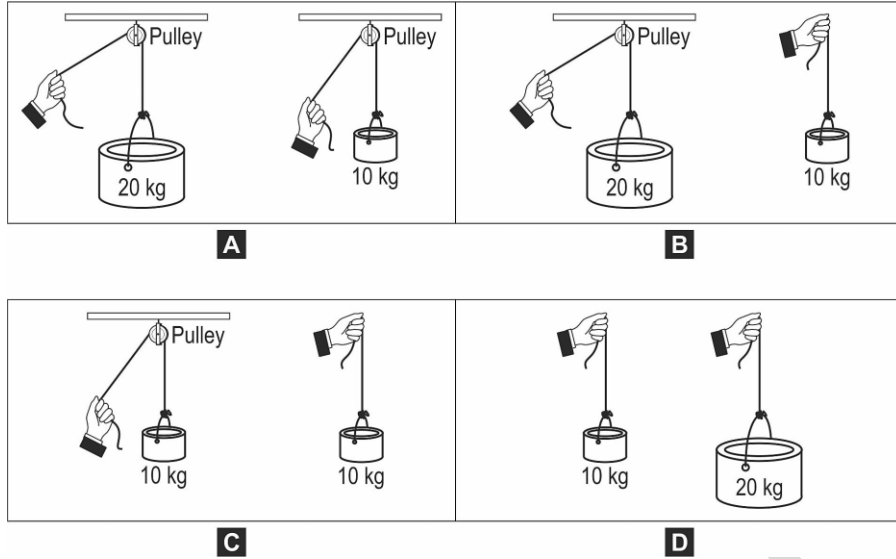


Which of the following is likely to be true about the above plant?

- A. It will not need food.
- B. It will not need light.
- C. It will not grow on land.
- D. It will not need long roots.

NAS LO: Guesses (properties, conditions of phenomena), estimates spatial quantities (distance, area, volume, weight etc.) and time in simple standard units and verifies using simple tools/set ups. (e.g. floating/sinking/mixing/evaporation/germination/spoilage/breathing/taste)

Q4. Akshay wanted to check whether it is easier to lift an object with a pulley than without it. Doing which of the following experiments will help?



NAS LO: identifies signs, directions, location of different objects/landmarks of a locality/place visited in maps and predicts directions w.r.t. positions at different places for a location.

Q5. Nirmala is travelling by car on a straight road and can see the sun setting on her left as shown below.



In which direction is she travelling?

- A. East
- B. West
- C. North
- D. South

NAS/ SEAS/ SLAS PRACTICE TESTS

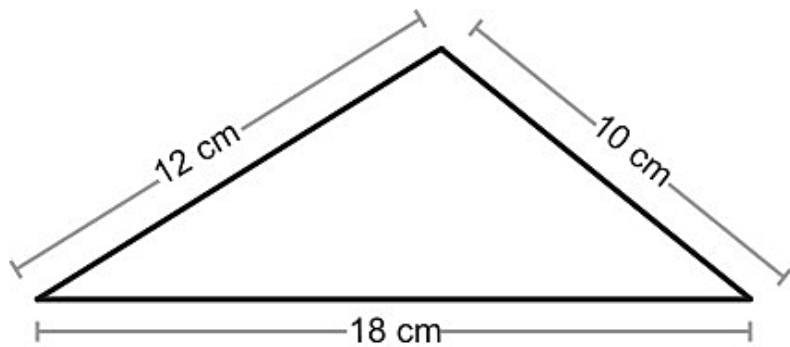
SET - VI

Grade 9

Mathematics

NAS LO: Finds out the perimeter and area of rectangular objects in the surroundings like floor of the class room, surfaces of a chalk box etc.

Q1. A triangular frame of wire shown below was straightened and cut into 4 equal pieces. Each piece was then bent to form a square frame.



What is the side of each square frame thus formed?

- A. 2.5 cm B. 3.3 cm C. 5 cm D. 10 cm

NAS LO: Adds/subtracts algebraic expressions.

Q2. Look at the inequality below.

$$3x - 14 \leq 3$$

Which of these values of x will make the inequality true?

- A. 4 B. 6 C. 8 D. 10

NAS LO: Find surface area and volume of cuboidal and cylindrical object

Q3. Two cylinders, whose heights are in the ratio 1:2, have the same volume.

What is the ratio of their base areas?

- A. 1:2 B. 2:1 C. 1:4 D. 4:1

NAS LO: Solves problems related to daily life situations involving rational numbers

Q4. p and q are two numbers such that $p \times q$ is an integer but $p - q$ is NOT an integer. Which of the following could be the values of p and q ?

A. -4, 4

B. 4, 4

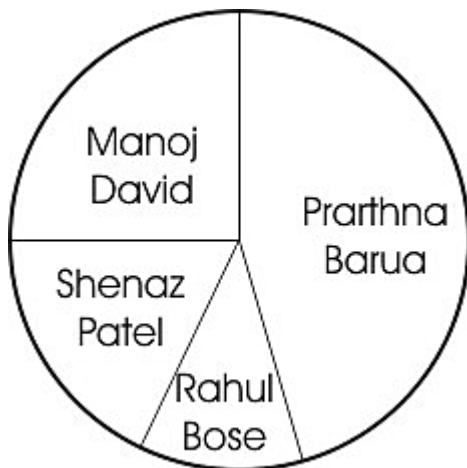
C. $\frac{1}{4}$, $\frac{1}{4}$

D. 4, $\frac{1}{4}$

NAS LO: Draws and interprets bar charts and pie charts

Q5. Study the pie chart below to answer the question that follows.

All the high school students of Green Earth School voted to elect their School Pupil Leader from four candidates - Manoj David, Prarthana Barua, Rahul Bose and Shenaz Patel. The pie chart here shows the vote distribution among the four candidates.



Which of the following statements is true?

A. Prarthana got twice as many votes as Manoj.

B. A quarter of the students voted for Shehnaz.

C. Manoj alone got more votes than Rahul and Shehnaz put together.

D. Almost three-quarters of the students want either Manoj or Prarthana to be the Leader.

Science

NAS LO: Relates process and phenomenon with cause and effect

Q1. The water on Earth keeps getting converted from fresh water to marine water and back to fresh water. This cycle is constantly occurring in nature. Even then, the amount of fresh water available for human use is constantly decreasing around the world.

Which of these could be a reason for this?

- A. The amount of water from lakes and rivers used by industries has been increasing.
- B. The amount of rainfall has been less compared to the amount of cloud formation over the seas.
- C. The rate at which fresh water is being used is greater than the rate at which fresh water is being restored.
- D. The rate at which groundwater is being used is greater than the rate at which water from lakes and rivers is being used.

NAS LO: Relates process and phenomenon with cause and effect

Q2. Ball P is harder than ball Q.

Which of these is definitely true about the balls?

- A. Ball P is heavier than ball Q.
- B. Ball P is smaller in size than ball Q.
- C. Ball P sinks deeper in water than ball Q.
- D. (We cannot say any of the above without knowing the materials the balls are made of.)

NAS LO: Applies learning of scientific concepts in day to day life.

Q3. Freshly fallen snow is a better heat insulator than old, hard-packed snow. Why?

- A. Freshly fallen snow is lighter.
- B. Freshly fallen snow is much softer.
- C. Freshly fallen snow is at a higher temperature.
- D. Freshly fallen snow has more air trapped between its crystals.

NAS LO: Conducts simple investigation to seek answer to queries

Q4. Substance P turns blue litmus red.

Substance Q turns red litmus blue.

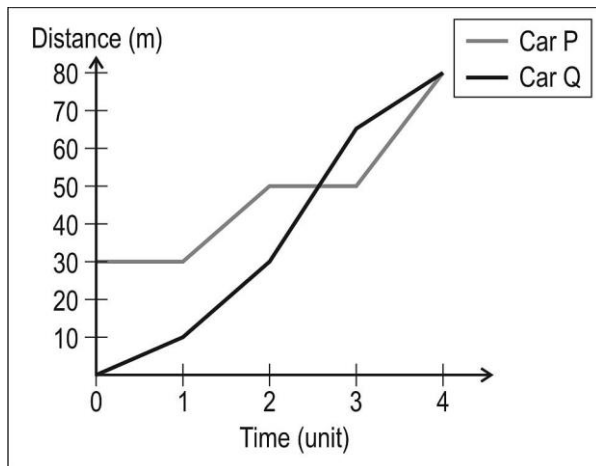
Substances P and Q react to produce substance R and water.

Which of these will definitely be true about substance R?

- A. It will turn blue litmus red.
- B. It will turn red litmus blue.
- C. It will neither turn red litmus blue nor blue litmus red.
- D. (Any of these may be possible depending upon the substance R.)

NAS LO: Measures and calculate e.g., temperature, pulse rate, speed of moving objects, time period of a simple pendulum etc.

Q5. Shown below are the distance-time graphs of two cars, Car P and Car Q.



In which time interval is the speed of Car P higher than that of Car Q?

- A. 0 to 1 unit
- B. 1 to 2 units
- C. 2 to 3 units
- D. 3 to 4 units

Social Science

NAS LO: Identifies latitudes and longitudes, e.g., poles, equator, tropics, States/UTs of India and other neighbouring countries on globe and the world map

Q1. Which of the following would different places with the same latitude MOST LIKELY share?

- A. rainfall
- B. altitude
- C. landforms
- D. temperature

NAS LO: Distinguishes the modern period from the medieval and the ancient periods through the use of sources

Q2. This colonial painting depicts a girls' school in Mumbai (formerly Bombay). The painting MOST PROBABLY dates from the _____.



- A. 19th century
- B. 17th century
- C. 15th century
- D. 13th century

NAS LO: Describes the process of election to the legislative assembly

Q3. The total number of MLAs in a Legislative Assembly is 40.

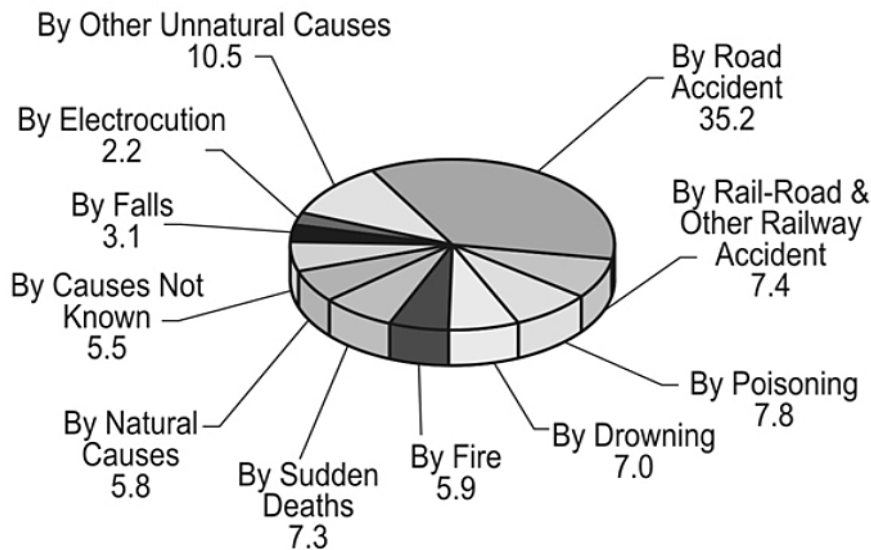
How many MLAs does a political party need in order to gain a clear majority?

- A. 10 to 12
- B. 12 to 15
- C. more than 20
- D. at least 30

NAS LO: Draws bar diagram to show population of different countries/India/states.

Q4. This pie chart provides information about various causes of accidental deaths in India. The government wants to issue safety messages to citizens to bring down the rate of accidental deaths.

Percentage Share of Various Causes of Accidental Deaths During 2012 (Natural and Unnatural Causes)



Based on the causes of accidental deaths, which of these messages should be given the HIGHEST priority?

- A. messages related to following traffic rules
- B. messages related to travelling carefully on trains
- C. messages related to preventing fires and avoiding electric shocks
- D. messages related to staying safe during floods and other natural disasters

NAS LO: Applies the knowledge of the Fundamental Rights to find out about their violation, protection and promotion in a given situation

Q5. One of the fundamental rights recognised by the Indian constitution is the Right to Equality.

Which of the following is NOT covered under this right?

- A. All citizens can apply for government jobs.
- B. All citizens have free access to public spaces.
- C. Rights to basic amenities like water are given to all citizens.
- D. Wealth and resources are distributed equally among all citizens.

SCERT AP