

Common factors :- When we find the factors of two or more numbers, and then find some factors are the same (common), then they are the 'common factors'.

Example :- 12 and 16

The factors of 12 are :- ①, ②, 3, ④, 6 and 12

The factors of 16 are :- ①, ②, ④, 8 and 16

So, the common factors of 12 and 16 are:
1, 2 and 4

Multiples :- The product of two or more numbers is called a multiple of each of the numbers.

Examples :- i) $5 \times 7 = 35$. So, 35 is a multiple of 5 as well as 7.

ii) $2 \times 3 = 6$. So, 6 is a multiple of 2 as well as 3.

$1 \times$ a number = the number itself. So,

1) Every number is a multiple of itself.

Also, every number can be multiplied by countless natural numbers. So,

2) Every number has a countless number of multiples.

For example, the multiples of 2 are
 $2 \times 1, 2 \times 2, 2 \times 3, 2 \times 4, \dots$

A number that divides a bigger number without leaving a remainder is called a factor (or divisor) of the bigger number, while the bigger number is called its multiple.

Common multiples :- A common multiple is a whole number that is a shared multiple of each set of numbers. The multiples that are common to two or more numbers are called the common multiples of those numbers.

Example :- 3 and 4

Multiples of 3 : 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36...

Multiples of 4 : 4, 8, 12, 16, 20, 24, 28, 32, 36, ...

Common multiples of 3 and 4 : 12, 24, 36, ...

Classification of numbers

Whole numbers are classified on the basis of their factors and multiples.

Even number :- A number is called an even number if it is a multiple of 2. In other words, 2 is a factor of every even number or every even number can be divided by 2.

The number 0 and the digits that are multiples of 2 are called even digits. So, 0, 2, 4, 6 and 8 are the five even digits.

odd number :- A number is called an odd number if it is not a multiple of 2. In other words, 2 is not a factor of any odd number, or no odd number can be divided by 2.

The five odd digits are 1, 3, 5, 7, 9

Any whole number is either odd or even. An even number must have an even digit in the ones place. An odd number has an odd digit in the ones place.

Prime number :- A natural number other than 1 is called a prime number if it does not have a factor other than 1 and the number itself. Some prime numbers are 2, 3, 5, 7, 11, 13, 17 and 19.

2 is the only even prime number.

Odd primes :- An odd prime simply denotes all numbers that are prime and odd which includes all prime numbers except the number 2 which is both prime and even.

Example :- 3, 5, 7, 11, 13, 17 etc.

Twin prime :- A twin prime is a prime number that is either 2 less or 2 more than another prime number. For example, either member of the twin prime pair (41, 43). In other words, a twin prime that has a prime gap of 2.

Co-prime numbers :- Two natural numbers are called co-prime numbers if they do not have a common factor other than 1. For example, 4 and 9; 5 and 11; and 3 and 8 are co-prime numbers.

Composite number :- A natural number is called a composite number if it has at least one factor other than 1 and the number itself. Some of the composite numbers are 4, 6, 8, 10, 12, 14, 15, 16.

All even numbers other than 2 are composite numbers. 1 is neither a prime number nor a composite number.

02.05.2020

**SOLUTION TO PREVIOUS HOME ASSIGNMENT
CLASS-VI BIOLOGY**

SOLUTION OF 3rd HOME ASSIGNMENT OF CHAPTER 1

1. Name the following:

i. Tiny pores present on the lower surface of the leaves.

Ans. Stomata.

ii. The gas released due to photosynthesis.

Ans. Oxygen.

iii. The condition caused due to excess transpiration.

Ans. Wilting of plant.

iv. The three different ways in which leaves are arranged.

Ans. Alternate, opposite and whorled.

2. State three advantages of transpiration and discuss.

Ans. The three advantages of transpiration are:

1. Ascent of sap and removal of excess water- Transpiration helps to maintain a proper concentration of sap inside the plant body: The roots continue to absorb water from the soil. If excess water does not evaporate through transpiration, the sap will become dilute, preventing further absorption of water and minerals from the soil.

2. Cooling effect- The water escapes from the surface of the leaves, the heat required for evaporation of water is obtained from the plant itself and thus the plant cools itself when it is hot outside.

3. Good quality fruits and increasing concentration of mineral salt- With transpiration, the sap solution inside the plant becomes concentrated. Thus it yield fruits with high sugar and other mineral content.

3. What is meant by the term photosynthesis?

Ans. The green leaves prepare food for the plants in the presence of sunlight and chlorophyll by a process called photosynthesis. In this process, the leaves use carbon dioxide and water to make food in the form of starch. Oxygen gas is released in this process.

4. Mention the three functions of leaves.

Ans. The three functions of leaves are: i) Manufacture of food
ii) Transpiration
iii) Gaseous exchange

5. Define phyllotaxy.

Ans. The term used for the arrangement of leaves on the branches is phyllotaxy.

02.05.2020

**4th HOME ASSIGNMENT
CLASS-VI BIOLOGY
CHAPTER -1 (PLANT LIFE- THE LEAF)**

MODIFICATION OF LEAVES contd... (discussed in 1st assignment) details discussed below:

1. Leaf tendril, 2. Spines and 3. Scale leaves

4. Phyllode: Phyllodes are modified petioles or leaf stems, becomes flattened and are leaf-like in appearance and function. In some plants, these become flattened and widened, while the leaf itself becomes reduced or vanishes altogether. Thus, the phyllode comes to serve the purpose of the leaf. For example Australian Acacia.



Acacia

❖ **Various modifications of leaf tendrils**

- In wild pea, the entire leaf is modified into a tendril.
- In sweet pea, only upper leaflets are modified into tendrils.
- In Naravelia, the terminal leaflets are modified into tendrils.
- In Glory lily, the leaf tips are modified into tendrils.
- In, Clematis, the petiole of leaf gets modified into tendril.

❖ **Modification of cactus plants (into spines)**

Cactus plants do not have broad, green leaves. In these plants their thick, green stems perform the process of photosynthesis. Leaves are modified to reduce water loss by transpiration because the cactus plant grows in desert areas where there is scarcity of water. The leaf spines also protect the plants from the grazing animals like goat and sheep.

MODIFICATIONS OF LEAVES IN INSECTIVOROUS PLANTS

Insectivorous plants such as pitcher plant, venus flytrap and bladderwort are adapted to grow in soil which does not have enough minerals, especially nitrogen. These plants feed on insects to obtain minerals. For this, they are modified to trap insects. They have chlorophyll in their leaves that help them in making of food. Examples of some modified insectivorous plants are as follows:

Pitcher Plant

In the pitcher plant, the lamina of the leaf is modified into a trapping device called pitcher. The leaf apex forms the lid of the pitcher and petiole coils like a tendril. As soon as the insect enters the pitcher, the lid closes and insect gets trapped and digested by the juice secreted at the bottom of the pitcher.

Venus Flytrap

In this plant, the edges of the leaves have long pointed hairs. The lamina of the leaf is divided into two parts having a midrib in between like a hinge. When an insect visit the plant, the leaf suddenly closes and the insect gets trapped and digested by the juice secreted by the leaf.

Bladderwort

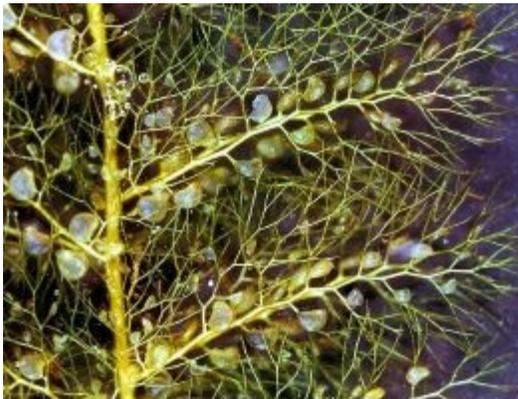
The leaves of the bladderwort are highly segmented. Some segments form bladder-like structures. When an insect enters through the opening, it gets trapped. The insect cannot come out from the opening and gets digested by the juice secreted by the leaves.



Pitcher Plant



Venus Flytrap



Bladderwort

HOMEWORK QUESTIONS:

1. Which part of the cactus plants gets modified into spines?
2. Why the leaves in cactus plants are reduced to spines?
3. Give two examples of insectivorous plants.
4. In pitcher plant which part of the leaf gets modified into: a) pitcher b) lid

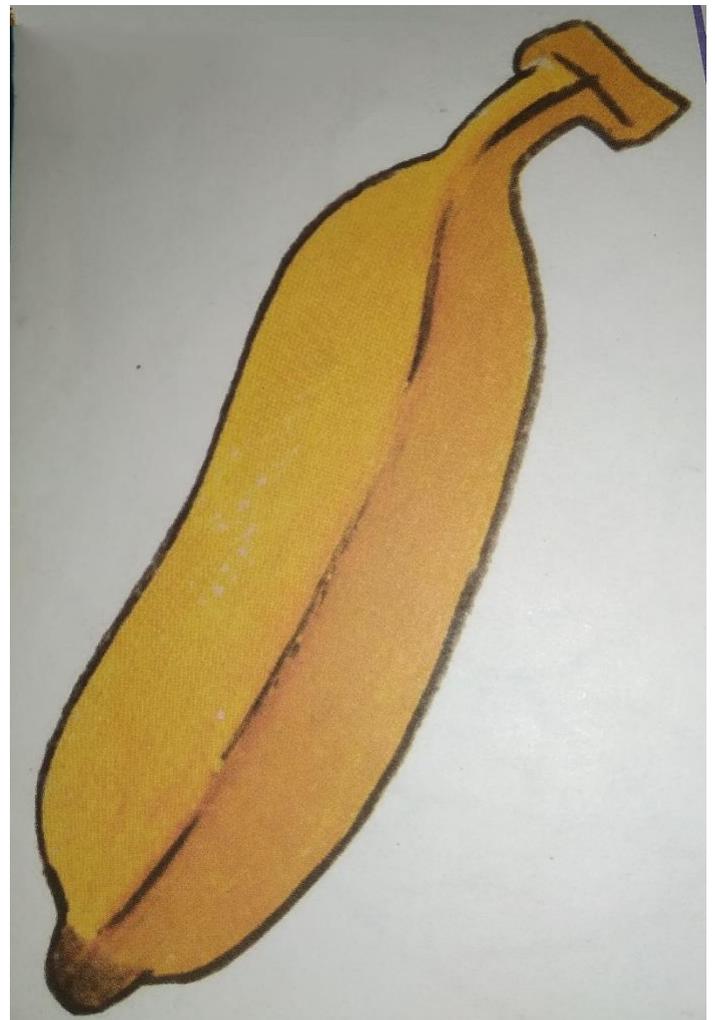
HOME ASSIGNMENT

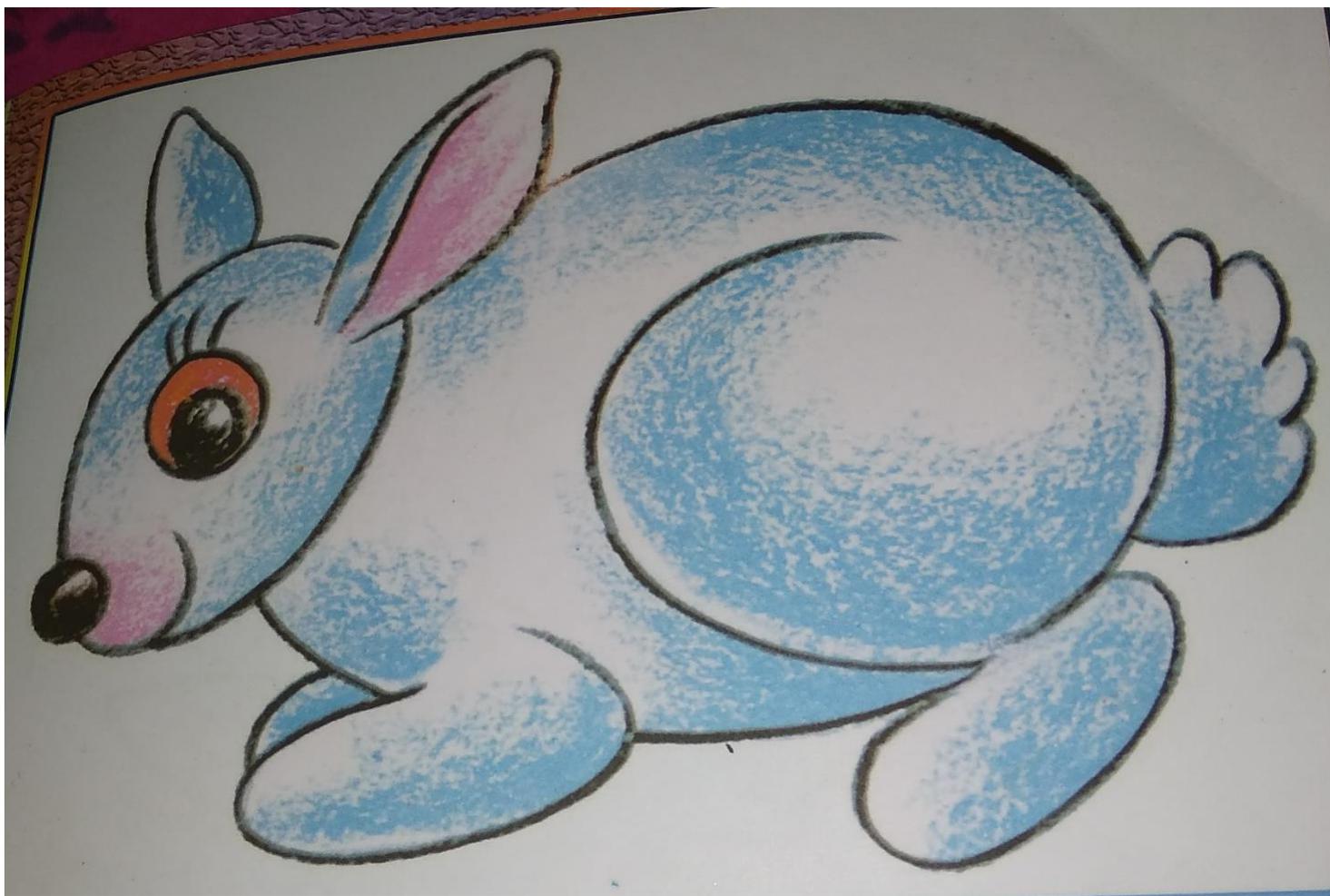
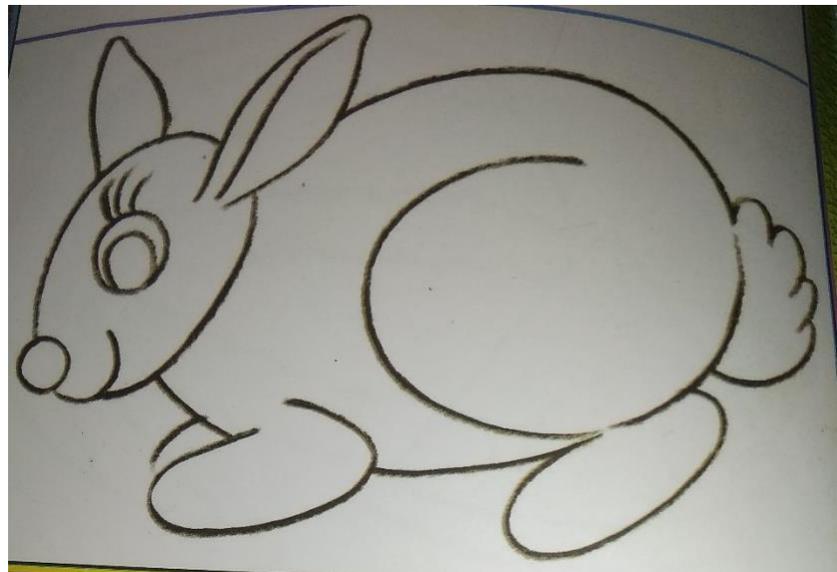
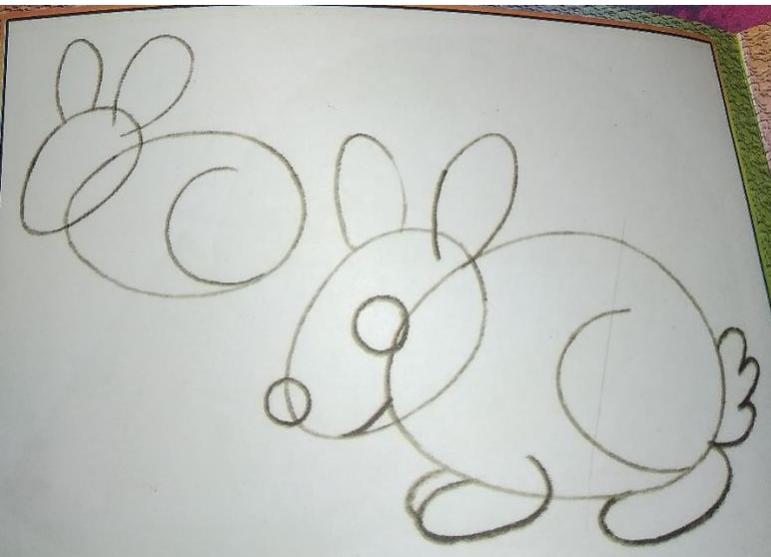
CLASS – VI

SUBJECT – ART EDUCATION

DATE - 02.05.2020

Draw step by step and colour this two pictures :-





Date: 02.05.2020

**COMPUTER (HOME ASSIGNMENT –4)
CLASS – 6**

**CHAPTER: 1 (COMPUTERS' & ITS LANGUAGES' TYPES)
STUDY MATERIAL NO. – 1.4**

- **Mainframe** :-

A mainframe computer is the fastest computer after supercomputer to execute complex and lengthy calculations, is a combination of memory (RAM) and many processors. It is more powerful than Mini and Microcomputer, but less powerful than Supercomputer and used primarily by large organizations for critical applications like - bulk data processing... such as census, industry and consumer statistics, enterprise resource planning; and transaction processing ,because they have more processing power than some other classes of computers: minicomputers, servers, workstations and personal computers. Some example of mainframe computers are: IBM SYSTEM Z10, ViON manufactured by Hitachi, CDC 6600, IBM'S ES000, VAX 8000.



Picture of Mainframe.

- **Super Computer** :-

A supercomputer is the fastest computer in the world that can process a significant amount of data very quickly. The performance of a supercomputer is commonly measured in floating-point operations per

second (FLOPS) instead of million instructions per second (MIPS). These computers are very expensive and are employed for specialized applications that require huge amounts of mathematical calculations. For example, weather forecasting requires a supercomputer. Other uses of supercomputers include animated graphics, fluid dynamic calculations, nuclear energy research, and petroleum exploration. Examples of single machine supercomputers include the early Cray-1 and Cray X-MP systems developed by Cray Research as well as the more recent Blue Gene and Roadrunner systems developed by IBM. The world's fastest computer is "Tianhe-2" made in China.

Top 5 super computers

	Name	Country	Features
1	Tianhe 1A	China	NUDT TH MPP, X5670 2.93Ghz 6C, Nvidia GPU, FT-1000 8C
2	Jaguar	United States	Cray XT5 - HE Opteron Six Core 2.6 GHz
3	Nebulae	China	Dawning TC3600 Blade, Intel X5650, Nvidia Tesla C2050 GPU
4	Tsubame 2.0	Japan	HP ProLiant SL390s G7 Xeon 6C X5670, Nvidia GPU, Linux/Windows
5	Hopper	United States	Cray XE6 12-core 2.1 GHz

SUBJECT – ENGLISH LANGUAGE
CLASS - VI
STUDY MATERIAL NUMBER - 8
EXPLANATION & HOME ASSIGNMENT
CHAPTER-7 [ADJECTIVES]
DATE : 02/05/2020

SOLUTION OF CHAPTER – 7 [ADJECTIVE]
STUDY MATERIAL NUMBER – 7
HOME ASSIGNMENT OR HOME WORK

EX-E) Fill in the blanks with suitable adjectives given in the bracket :-

1. more
2. stronger
3. most
4. noble
5. the best
6. longest
7. darkest
8. wise
9. faster
10. best

EX-F) Identify the adjectives in the following sentences :-

1. There I met a very **beautiful** woman.
2. The **kind** hostess made sure that everyone was **happy**.
3. He was wearing a **red** shirt.
4. The **rich** woman is known for her generosity.
5. In spite of being **rich** and **famous**, she leads a **miserable** life.
6. Her **arrogant** nature made her very **unpopular**.
7. He wants to be a **successful** lawyer.
8. The **anxious** mother waited for a call from her son.
9. The old man has seen **better** days.
10. Iron is a **useful** metal.
11. The offer was so **good** that I could not refuse it.

(*CONTINUATION OF CHAPTER-7)

6. Degrees of Comparison :-

A comparison can be made using the three forms of the adjective. Adjectives are of three degrees. As we have learnt in earlier classes, adjectives are the words that qualify a noun or a pronoun.

e.g.

1. Shimla is a **beautiful** place. (Quality)
2. Shimla is **more beautiful** than Vardhaman.
3. Shimla is the **most beautiful** place in Himachal Pradesh.

All the three sentences above are talking about the 'quality' of a place. But the degree of the same quality spoken about is different in the three sentences. So, we can say that an adjective has three degrees or three forms.

7. Three Degrees of Adjectives :-

i) Positive Degree

The positive degree of an adjective in comparison is the adjective when, it is in the simplest form. It is used to indicate the mere existence of some quality of what we are speaking about. It is used when no comparison is made.

e.g.

1. The girl is a fast runner.
2. The soldiers are bold.

When we compare two objects (persons or places) using positive degree, we say that the degree of the quality being spoken about is the same in both the objects.

e.g.

1. Ritu is as smart as Rahul.
2. My pen is as expensive as yours.

ii) Comparative Degree

The comparative degree of an adjective in comparison indicates the existence of a higher degree of the quality than the positive. It is used when two things (or two sets of things) are being compared.

e.g.

1. These trees are taller than those.
2. Mangoes are sweeter than grapes.

iii) Superlative Degree

The superlative degree indicates the existence of the highest degree of the quality. It is used when more than two things are compared.

e.g.

1. This is the tallest building.
2. Mango is the sweetest fruit.

Lists of Degrees of Comparison

1. By adding 'er' and 'est'

Positive	Comparative	Superlative
Bright	brighter	brightest
Black	blacker	blackest
Bold	bolder	boldest
Clever	cleverer	cleverest
Cold	colder	coldest
Fast	faster	fastest
Great	greater	greatest
High	higher	highest
Kind	kinder	kindest
Long	longer	longest
Small	smaller	smallest
Strong	stronger	strongest
Sweet	sweeter	sweetest
Tall	taller	tallest
Young	younger	youngest

2. By adding 'r' and 'st' to the adjectives ending in 'e'

Positive	Comparative	Superlative
Brave	braver	bravest
Fine	finer	finest
Large	larger	largest
Nice	nicer	nicest
Noble	nobler	noblest
Pale	paler	palest
Simple	simpler	simplest
Wise	wiser	wisest
White	whiter	whitest

3. By removing the final 'y' and adding 'ier' and 'iest'

Positive	Comparative	Superlative
Costly	costlier	costliest
Dry	drier	driest
Easy	easier	easiest
Happy	happier	happiest
Heavy	heavier	heaviest
Lazy	lazier	laziest
Wealthy	wealthier	wealthiest

4. By doubling the final consonants

(When the last letter is a consonant and the second last a vowel) and adding 'er' and 'est'

Positive	Comparative	Superlative
Big	bigger	biggest
Dim	dimmer	dimmest
Fat	fatter	fattest
Hot	hotter	hottest
Thin	thinner	thinnest

5. By using more and most

Positive	Comparative	Superlative
Active	more active	most active
Attractive	more attractive	most attractive
Beautiful	more beautiful	most beautiful
Brilliant	more brilliant	most brilliant
Careful	more careful	most careful
Courageous	more courageous	most courageous
Cunning	more cunning	most cunning
Difficult	more difficult	most difficult
Famous	more famous	most famous
Faithful	more faithful	most faithful
Proper	more proper	most proper
Popular	more popular	most popular
Splendid	more splendid	most splendid

6. Irregular Comparisons

Positive	Comparative	Superlative
Bad	worse	worst
Evil	worse	worst
Good	better	best
Ill	worse	worst
Far	farther	farthest
Well	better	best
Late	later	latest
Little	less	least
Much	more	most
Many	more	most
Near	nearer	nearest
Old	older	oldest
Old	elder	eldest

HOME ASSIGNMENT OR HOME WORK

SOLVE THE FOLLOWING EXERCISES GIVEN BELOW :-

EX-G) Complete the following table:-

Positive	Comparative	Superlative
Good		
Smart		
	Stronger	
Helpful		
		Bravest
Many		
Old		
	More Beautiful	
		Richest
	Wealthier	

EX-H) Fill in the blanks with the correct form of degree of the adjectives given in brackets :-

1. Nadira was the most..... girl that Salim had ever seen. (beautiful)
2. I have not seen any child that is than Sharvilak. (naughty)
3. To preach is..... than to practise. (easy)
4. These lights are..... than those ones, (bright)
5. Hollywood movies are grory but not as..... bollywood movies. (interesting)
6. Mumbai is much..... than any other city in Maharashtra. (busy)
7. Who is the..... actress according to you? (pretty)
8. I think, this cloth is..... that we purchased earlier.(fine)
9. Autumn is the season that I have ever loved. (lovely)
10. Living in Bangalore is than living in Hyderabad.(expensive)

EX-I) Complete the following sentences by choosing the right option:-

1. Ram is a.....boy
(a) clever
(b) cleverer
(c) cleverest
(d) most cleverest
2. He had only.....mangoes
(a) a little

- (b) many
 - (c) five
 - (d) single
3. The..... boy had to be punished.
 - (a) carefree
 - (b) careful
 - (c) careless
 - (d) caring
 4. He had lost..... his wealth.
 - (a) entire
 - (b) whole
 - (c) all
 - (d) less
 5. The..... woman lives in a small hut.
 - (a) poor
 - (b) poorer
 - (c) poorest
 - (d) most poor
 6. He saw it with his.....eyes.
 - (a) owned
 - (b) owner
 - (c) own
 - (d) our
 7. He was a man of ambition.
 - (a) greatest
 - (b) greater
 - (c) great
 - (d) greed

EX-J) Complete the following sentences using the appropriate form of the adjective given in the brackets. :-

1. He is than his neighbors.

rich
richer
richest

2. The brides were much than the grooms.

young
younger
youngest

3. He is too to be taught.

intelligent
more intelligent
most intelligent

4. He is than I thought him to be.

clever
cleverer
cleverest

5. When the old woman became, she began to move about.

stronger
more strong

6. He is much now.

good
better
best

7. The offer was too to be true.

good
better
best

8. He fishes with success than I do.

great
greater
greatest

9. Shakespeare is the playwright in English.

great
greater
greatest

10. The pain was than he could bear.

much
more
most

11. The thing of all was that his son was rude to him.

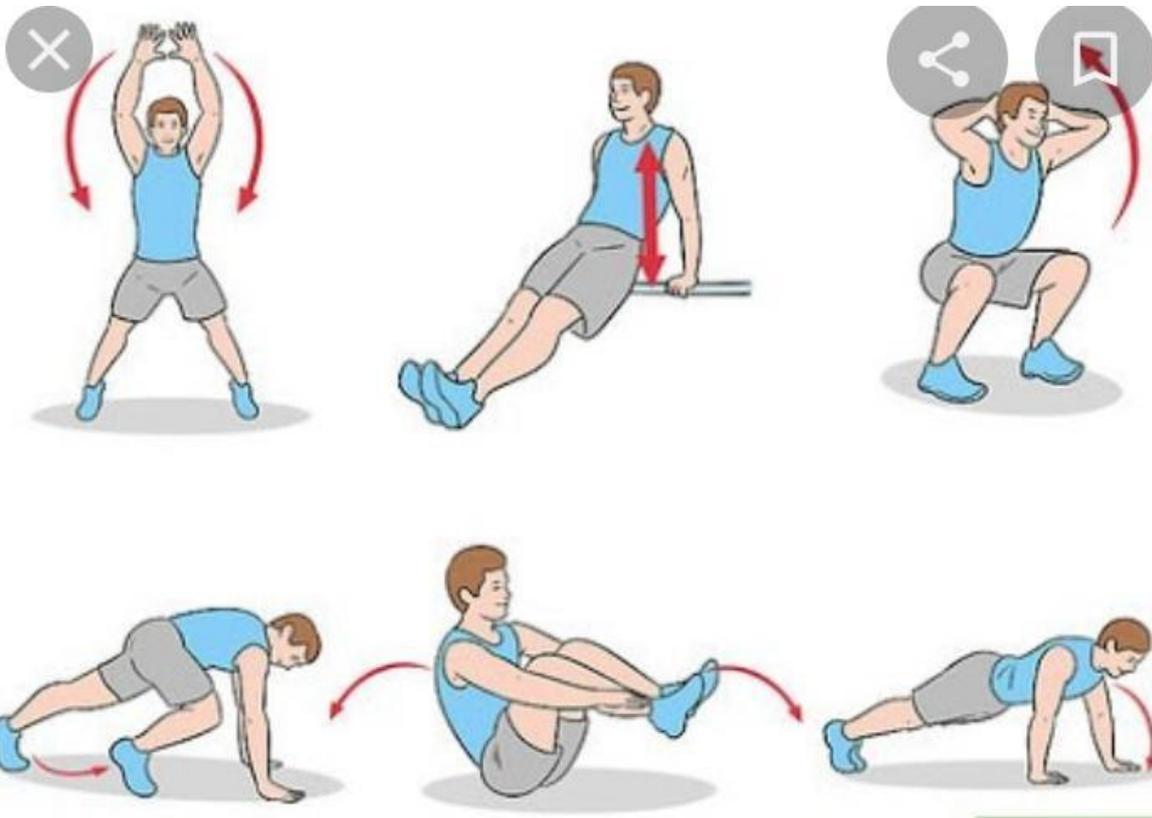
bad
worse
worst

12. Jane was the player of the two.

good
better
best

How exercise can help to make us fit

Physical activity keeps us healthy and studies show that regular exercise can boost our immune system. Additional studies have shown that exercise can help improve mental health — boosting our mood, reducing anxiety and helping us [manage stress](#).



Benefits of regular physical activity

If you are regularly physically active, you may:

1. reduce your risk of a heart attack
2. manage your weight better
3. have a lower blood cholesterol level
4. lower the risk of type 2 diabetes and some cancers
5. have lower blood pressure

6. have stronger bones, muscles and joints and lower risk of developing osteoporosis
7. lower your risk of falls
8. recover better from periods of hospitalisation or bed rest
9. feel better – with more energy, a better mood, feel more relaxed and sleep better.

A healthier state of mind

A number of studies have found that exercise helps depression. There are many views as to how exercise helps people with depression:

- 1.Exercise may block negative thoughts or distract you from daily worries.
- 2.Exercising with others provides an opportunity for increased social contact.
- 3.Increased fitness may lift your mood and improve your sleep patterns.
- 4.Exercise may also change levels of chemicals in your brain, such as serotonin, endorphins and stress hormones.

Click on the below link for exercise video:-

https://youtu.be/ZMO_XC9w7Lw