

MOUNT CARMEL PUBLIC SCHOOL

Session-2020-2021

Class VII Study Materials Date – 08.05.2020



MOUNT CARMEL
PUBLIC SCHOOL
A Step towards excellence....



FACILITIES

- STATE OF THE ART CAMPUS (WITHIN 3 YEARS)
- CBSE STUDY PATTERN
- PRINCIPAL/ TEACHERS FROM OTHER STATES
- ADVANCE COMPUTER LAB FOR STUDENTS
- CENTRALIZED AIR CONDITION CLASSROOMS
- SMART CLASSES
- CLASSROOM MONITORING THROUGH CCTV
- PICK & DROP FACILITY
- RO WATER FOR STUDENTS
- SCHOLARSHIP FOR MERITORIOUS STUDENTS
- NTSE/ OLYMPIAD PARTICIPATION
- YOGA & MEDITATION
- PHYSICAL TRAINER FOR STUDENTS
- DANCE, ART & CRAFT, MUSIC

✓ PLAY GROUP (PG) / NURSERY
✓ KINDERGARTEN (KG)
✓ CLASS I TO CLASS VII (UP TO CLASS X)

An English Medium Co-education School | CBSE Pattern



ADMISSION STARTS (LIMITED SEATS)

PLAY GROUP/ NURSERY & KINDERGARTEN
↑ ONLY 25 SEATS PER CLASS

CLASS I TO CLASS VII (UP TO CLASS X)
↑ ONLY 30 SEATS PER CLASS

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English

Topic: Adjectives

■ Nouns as Adjectives

Depending on usage, a noun may play the role of an adjective.

Here are a few nouns: *geography*, *city*, *village* and *school*. When we join them with some other nouns, we get words such as: *geography teacher*, *city girl*, *village school* and *school girl*.

In all these examples, the first word is a noun which describes the second word, also a noun. The first noun then plays the role of an adjective, and the second is in the role of a noun.

- The noun used as an adjective always comes before the noun.
- When we use a noun as an adjective, the noun used as an adjective must always be singular.

The *table* fan is not working.

The *table* fans are not working. (~~tables fan~~)



■ More than one noun can also be used to describe another noun.

cricket team captain, *company board meeting*

A

Combine nouns in the first column with the nouns in the second column to show their common usage as adjectives. The first one has been done for you.

1.	love	book	love story
2.	guard	table	
3.	fairy	theatre	
4.	computer	news	
5.	tomato	tale	
6.	world	story	
7.	home	dog	
8.	complaint	ketchup	

B

In the following sentences, identify the nouns acting as adjectives.

EXERCISE

1. The boys threw stones at the street dog.
2. Fruit salad is a good way to start a meal.
3. A bowl of mother's chicken soup made me feel well again.
4. Crop cultivation techniques are improving every year.
5. Some of the school teachers are on strike.



History

Topic: Tracing Changes Through a Thousand Years

❖ Old and New Religions:

Question 1.

What developments have taken place in religious traditions during this period?

Answer:

During the thousand years there were many developments in religious traditions. People's belief in divine was personal and collective. Collective belief was in supernatural agency-religion. It was connected to social and economic aspects of local communities. With the changes in social aspects the religious beliefs also changed.

Question 2.

Describe the major development in Hindu religious traditions during the period 700 to 1750 A.D.

Answer:

- The thousand years of history between 700 and 1750 A.D. witnessed major developments in religious traditions.
- It was during this period that important changes occurred in Hinduism.
- The worship of new deities.
- The construction of temples by royalty.
- Their knowledge of Sanskrit texts earned the Brahmanas a lot of respect in society and support of new rulers or patrons searching for prestige.
- One of the major developments was the emergence of the idea of Bhakti.
- It was of a loving, personal deity that devotees could reach without the aid of priests or elaborate rituals.

Which new religion came to India during the period between 700 and 1750 A.D.?

Answer:

The period between 700 and 1750 A.D. was the period when new religions appeared in the subcontinent. Merchants and migrants first brought the teachings of the holy Quran to India in the seventh century. Many rulers were patrons of Islam, Jurists and theologians.

- Muslims regard the Quran as their holy book.
- They accept the sovereignty of the one God or Allah.
- Islam was interpreted in a variety of ways by its followers:
- Shia Muslims believed that the prophet's son-in-law, Ali, was the legitimate leader of the Muslim community.
- Sunni Muslims accepted the authority of the early leaders (Khalifas) of the community, and the succeeding Khalifas.
- There were other important differences between the various schools of law and in theology and mystic traditions.
- The schools of law are Hanafi and Shafi'i, mainly in India.

Exercise:

- 1. Which period witnessed major developments in Hinduism?**
- 2. Which sect earned a lot of respect between 700 and 1750 A.D. and why?**
- 3. How was Islam interpreted by Shia and Sunni Muslims?**

<https://www.youtube.com/watch?v=-dp2gTEctnw>

शब्द-विचार (Morphology)

बच्चो! ये तो आप जान ही गए हैं कि भाषा की सबसे छोटी इकाई वर्ण है। इन्हीं वर्णों के मेल से शब्द बनते हैं। कुछ शब्द केवल एक वर्ण के होते हैं तो कुछ शब्द कई वर्णों के मेल से बनते हैं। वर्णों का ऐसा समूह ही शब्द कहलाता है जिसका कोई अर्थ हो। शब्द में वर्णों का व्यवस्थित होना भी अनिवार्य है अन्यथा शब्द निरर्थक होगा।



कमल

लकम



सूरज

रजसू



पौधा

धापौ

आपने देखा कि चित्रों के नीचे पहली पंक्ति में दिए शब्द सार्थक शब्द हैं जबकि दूसरी पंक्ति में दिए शब्द वर्ण समूह तो हैं पर शब्द नहीं हैं।

वर्णों के व्यवस्थित तथा सार्थक समूह को **शब्द** कहते हैं।

शब्दों के भेद

हिंदी भाषा में जितने भी शब्द हैं उनका उत्पत्ति, रचना, प्रयोग तथा अर्थ के आधार पर वर्गीकरण किया गया है।



1. **उत्पत्ति के आधार पर** : उत्पत्ति के आधार पर शब्दों के पाँच भेद हैं।

(क) **तत्सम शब्द** : वे शब्द जो संस्कृत भाषा से हिंदी में आए हैं तथा ज्यों के त्यों प्रयोग में लाए जाते हैं, उन्हें **तत्सम शब्द** कहते हैं। उदाहरण—जल, रात्रि, शिक्षक, अग्नि, पर्वत आदि।

(ख) **तद्भव शब्द** : **तद्भव शब्द** वे शब्द हैं जो मूलरूप से संस्कृत के शब्दों का परिवर्तित रूप हैं। उदाहरण—रात, सीख, दूध, घी आदि।

तत्सम
अग्नि
आम्र
अश्रु
आश्रय
उच्च
कूप
कोकिल
गर्दभ
छिद्र
दुग्ध
भ्रातृ
धूम्र
दंत
मस्तक
शाक
हस्त
सूत्र

तद्भव
आग
आम
आँसू
आसरा
ऊँचा
कुआँ
कोयल
गधा
छेद
दूध
भाई
धुआँ
दाँत
माथा
साग
हाथ
सूत

तत्सम
अग्र
अंबा
अंगुष्ठ
आश्चर्य
काष्ठ
कंटक
गृह
घृत
जिह्वा
नग्न
एकत्र
दंड
दुर्बल
मक्षिका
शिक्षा
लक्ष्य
रात्रि

तद्भव
आगे
अम्मा
आँगूठा
अचरज
काठ
काँटा
घर
घी
जीभ
नंगा
इकट्ठा
डंडा
दुबला
मक्खी
सीख
लाख
रात

तत्सम

अष्ट
अर्द्ध
कर्म
कर्ण
ग्राहक
चंद्र
दश
पत्र
क्षीर
दधि
नृत्य
धैर्य
हस्ति
सत्य
शत

तद्भव

आठ
आधा
काम
कान
गाहक
चाँद
दस
पत्ता
खीर
दही
नाच
धीरज
हाथी
सच
सौ

अक्षि

अंधकार

आँख

अँधेरा



1. नीचे दिए प्रश्नों के उत्तर दीजिए।

(क) तत्सम और तद्भव शब्दों में अंतर स्पष्ट कीजिए।

(ख) शब्द किसे कहते हैं? शब्द के भेदों के नाम लिखिए।

<https://www.youtube.com/watch?v=mv1VdJGYXeI>

Subject – Science
2. Nutrition in Animals

➤ The Digestive System

1. Mouth and Buccal Cavity

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2. The foodpipe/oesophagus

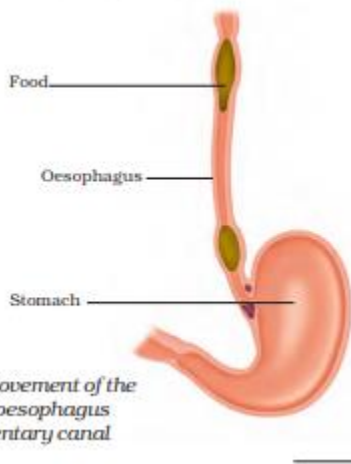


Fig. 2.7 Movement of the food in the oesophagus of the alimentary canal

- The swallowed food passes into the foodpipe or oesophagus.
- The foodpipe runs along the neck and the chest.
- Food is pushed down by movement of the wall of the foodpipe. Actually this movement takes place throughout the alimentary canal and pushes the food downwards.
- At times the food is not accepted by our stomach and is vomited out.

3. The stomach

The stomach is a thick-walled bag.

Its shape is like a flattened J and it is the widest part of the alimentary canal.

It receives food from the food pipe at one end and opens into the small intestine at the other.

The inner lining of the stomach secretes

1. mucous
2. hydrochloric acid and
3. digestive juices.

1. The mucous protects the lining of the stomach.

2. The acid kills many bacteria that enter along with the food and makes the medium in the stomach acidic and helps the digestive juices to act.

3. The digestive juices break down the proteins into simpler substances.

The working of the stomach was discovered by a strange accident. In 1822, a man named Alexis St. Martin was badly hit by a shotgun. The bullet had seriously damaged the chest wall and made a hole in his stomach. He was brought to an American army doctor William Beaumont. The doctor saved the patient but he could not close the hole properly and left it bandaged (Fig. 2.8). Beaumont took it as a great opportunity to see the inside of the stomach through the hole. He made some wonderful observations.

Beaumont found that the stomach was churning food. Its wall secreted a fluid which could digest the food. He also observed that the end of the stomach opens into the intestine only after the digestion of the food inside the stomach is completed.

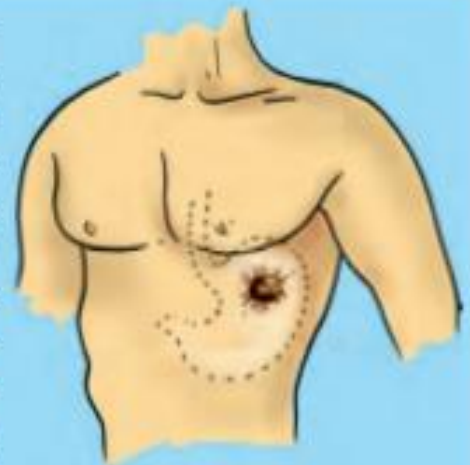


Fig. 2.8 Alexis St. Martin's shotgun wound

Exercise

1. Explain Foodpipe or Oesophagus.
2. _____ is the widest part of the alimentary canal.
3. What are the 3 things that secrete inside stomach? How they help in digestive system?

<https://www.youtube.com/watch?v=kXNfyP9Frw>

Subject - Mathematics

Integers

PROPERTIES OF DIVISION OF INTEGERS

- **Closure Property**

Statement	Inference	Statement	Inference
$(-8) \div (-4) = 2$	Result is an integer	$(-8) \div 3 = \frac{-8}{3}$	_____
$(-4) \div (-8) = \frac{-4}{-8}$	Result is not an integer	$3 \div (-8) = \frac{3}{-8}$	_____

We observe that integers are not closed under division.

- **Commutative Property**

Is $(-9) \div 3$ the same as $3 \div (-9)$?

Is $(-30) \div (-6)$ the same as $(-6) \div (-30)$?

Can we say that division is commutative for integers?

No.

- Like whole numbers, any integer divided by zero is meaningless and zero divided by an integer other than zero is equal to zero
i.e., for any integer a , $a \div 0$ is not defined
but $0 \div a = 0$ for $a \neq 0$.
- When we divide a whole number by 1 it gives the same whole number. Let us check whether it is true for negative integers also. Observe the following :

$$(-8) \div 1 = (-8)$$

$$(-11) \div 1 = -11$$

$$(-13) \div 1 = -13$$

$$(-25) \div 1 = \underline{\hspace{2cm}}$$

$$(-37) \div 1 = \underline{\hspace{2cm}}$$

$$(-48) \div 1 = \underline{\hspace{2cm}}$$

This shows that negative integer divided by 1 gives the same negative integer.

So, *any integer divided by 1 gives the same integer.*

In general, for any integer a ,

$$a \div 1 = a$$

EXAMPLE 6 In a test (+5) marks are given for every correct answer and (-2) marks are given for every incorrect answer. (i) Radhika answered all the questions and scored 30 marks though she got 10 correct answers. (ii) Jay also

answered all the questions and scored (-12) marks though he got 4 correct answers. How many incorrect answers had they attempted?

SOLUTION

- (i) Marks given for one correct answer = 5

So, marks given for 10 correct answers = $5 \times 10 = 50$

Radhika's score = 30

Marks obtained for incorrect answers = $30 - 50 = -20$

Marks given for one incorrect answer = (-2)

Therefore, number of incorrect answers = $(-20) \div (-2) = 10$

- (ii) Marks given for 4 correct answers = $5 \times 4 = 20$

Jay's score = -12

Marks obtained for incorrect answers = $-12 - 20 = -32$

Marks given for one incorrect answer = (-2)

Therefore number of incorrect answers = $(-32) \div (-2) = 16$

EXAMPLE 7 A shopkeeper earns a profit of ₹ 1 by selling one pen and incurs a loss of 40 paise per pencil while selling pencils of her old stock.

- (i) In a particular month she incurs a loss of ₹ 5. In this period, she sold 45 pens. How many pencils did she sell in this period?
- (ii) In the next month she earns neither profit nor loss. If she sold 70 pens, how many pencils did she sell?

SOLUTION

- (i) Profit earned by selling one pen = ₹ 1

Profit earned by selling 45 pens = ₹ 45, which we denote by + ₹ 45

Total loss given = ₹ 5, which we denote by – ₹ 5

Profit earned + Loss incurred = Total loss

Therefore, Loss incurred = Total Loss – Profit earned

= ₹ (– 5 – 45) = ₹ (–50) = –5000 paise

Loss incurred by selling one pencil = 40 paise which we write as –40 paise

So, number of pencils sold = $(-5000) \div (-40) = 125$

- (ii) In the next month there is neither profit nor loss.

So, Profit earned + Loss incurred = 0

i.e., Profit earned = – Loss incurred.

Now, profit earned by selling 70 pens = ₹ 70

Hence, loss incurred by selling pencils = ₹ 70 which we indicate by – ₹ 70 or – 7,000 paise.

Total number of pencils sold = $(-7000) \div (-40) = 175$ pencils.



Exercise

1. Evaluate each of the following:

- (a) $(-30) \div 10$ (b) $50 \div (-5)$ (c) $(-36) \div (-9)$
(d) $(-49) \div (49)$ (e) $13 \div [(-2) + 1]$ (f) $0 \div (-12)$
(g) $(-31) \div [(-30) + (-1)]$
(h) $[(-36) \div 12] \div 3$ (i) $[(-6) + 5] \div [(-2) + 1]$

2. Verify that $a \div (b + c) \neq (a \div b) + (a \div c)$ for each of the following values of a , b and c .

- (a) $a = 12, b = -4, c = 2$ (b) $a = (-10), b = 1, c = 1$

3. Fill in the blanks:

- (a) $369 \div \underline{\hspace{2cm}} = 369$ (b) $(-75) \div \underline{\hspace{2cm}} = -1$
(c) $(-206) \div \underline{\hspace{2cm}} = 1$ (d) $-87 \div \underline{\hspace{2cm}} = 87$
(e) $\underline{\hspace{2cm}} \div 1 = -87$ (f) $\underline{\hspace{2cm}} \div 48 = -1$
(g) $20 \div \underline{\hspace{2cm}} = -2$ (h) $\underline{\hspace{2cm}} \div (4) = -3$

4. Write five pairs of integers (a, b) such that $a \div b = -3$. One such pair is $(6, -2)$ because $6 \div (-2) = (-3)$.

5. The temperature at 12 noon was 10°C above zero. If it decreases at the rate of 2°C per hour until midnight, at what time would the temperature be 8°C below zero? What would be the temperature at mid-night?

6. In a class test $(+3)$ marks are given for every correct answer and (-2) marks are given for every incorrect answer and no marks for not attempting any question. (i) Radhika scored 20 marks. If she has got 12 correct answers, how many questions has she attempted incorrectly? (ii) Mohini scores -5 marks in this test, though she has got 7 correct answers. How many questions has she attempted incorrectly?

7. An elevator descends into a mine shaft at the rate of 6 m/min. If the descent starts from 10 m above the ground level, how long will it take to reach -350 m.