

Worksheet 3 SUBJECT-English Literature

Chapter- Where the Mind is Without Fear

Summary

In the very first line, the poet prays to the Almighty that his countrymen should be free from any fear of oppression.

In the second line of Where the Mind is Without Fear the poet dreams of a nation where knowledge would be free.

In the next two lines, the poet emphasizes the unity of not only of his countrymen but also of the entire world. In line 5 of Where the Mind is Without Fear, Tagore wants a nation where people are truthful.

In the sixth line of the poem, the poet wants everyone to work hard to reach their goal, and in the long run to reach perfection.

In line 7, the poet compares 'reason' or logical thinking to a "clear stream' and in the next line compares 'dead habits' or superstitious beliefs to a 'dreary desert'. In short, people's thought should be monitored by rational thinking, not by superstition; logic should rule over old baseless beliefs.

In line 9 and 10 the poet wishes his countrymen to be progressive and broad-minded.

In the final line of the poem, the poet addresses the God as 'Father'. He asks him to awaken his country into such a 'heaven of freedom' where the above conditions meet.

Worksheet

1) Explain the lines:

Where the world has not been broken up into fragments

By narrow domestic walls;

Where words come out from the depth of truth;

Where tireless striving stretches its arms towards perfection;

2) Answer the following questions:

- a) What has not lost its way?
- b) What does the poet mean in the first line of the poem?
- c) What do the words domestic walls mean?
- d) How can words come out from the depth of truth?
- e) What stretches its arms towards perfection?

HINDMOTOR HIGH SCHOOL Worksheet 3 SUBJECT-English Language Chapter- Adjectives describe nouns and pronouns.

Kinds of adjectives

1. **Adjectives of quality** refer to the kind, degree, or quality of something. **Examples of Adjectives of Quality**

Greasy, happy, thick, yearly, heavy, excited

2. Adjectives of quantity refer to how many or how much of something.

Examples of Adjectives of Quantity

Many, much, enough, few

3. Adjective of numbers expresses the number of persons or things.

Examples of Adjectives of numbers

Ten, first, last, four, second

4. **Demonstrative adjective** Demonstrative adjectives identify a specific noun.

Examples of Demonstrative adjectives

This, that, these, those

5. **Interrogative adjective** modifies a noun by asking a question.

Examples of Interrogative adjectives

Which, whose, what

6. **Possessive adjective** are **used to** show possession or ownership of something.

Examples of possessive adjectives

my, our, your, his, their, her, its.

Examples in sentences:

- 1. They live in a **beautiful** house.
- 2. This soup is not **edible**.
- 3. She wore a **beautiful** dress.
- 4. He writes **meaningless** letters.
- 5. This shop is much **nicer**.

Worksheet

1) Construct 2 sentences as examples of all the types of Adjectives (each type 2 sentences)-: (must not be copied from text books)

2) Rewrite the sentences after correcting the errors:

- a) The blue dress is the prettiest than the red one.
- b) The blue whale is the larger aquatic animal.
- c) The physics exam was the harder test I have taken this semester.
- d) Reading a more interesting book is always a good way to pass the time.
- e) Lionel Messi is considered by many to be the better player of this generation.
- f) Muralitharan is the higher wicket taker in Test cricket.
- g) The orchids were the more colourful among all the flowers in the garden.
- h) Pandav is the less hardworking person in the group.

Worksheet 3 SUBJECT-Hindi (कार्यपत्रिका-3)

विषय – व्याकरण – उपसर्ग / प्रत्यय

परिभाषा- वे शब्दांश जो शब्दों से पहले जुड़कर उनके अर्थ में परिवर्तन या विशेषता लादेते हैं, उपसर्ग कहलाते हैं। संस्कृत के उपसर्ग:-

<u>उपसर्ग</u>	<u>अर्थगत विशेषता</u>	<u>उदाहरण</u>
1. अ,अन	अभाव, निषेध	अगम,अज्ञात
2. अधि	ऊपर,श्रेष्ठ	अधिकार,अधिपति
3. अनु	पीछे, समान	अनुकूल,अनुरोध
4. अति	अधिक	अतिशय,अतिरिक्त
5. अभि	ओर,सामने	अभिमान,अभिशाप
6. अव	बुरा,हीन	अवगुण,अवनति
7. अप	बुरा,हीन	अपमान,अपशब्द
8. आ	तक,लेकर,समेत	आजीवनआमरण
9. उत	ऊपर,श्रेष्ठ	उत्थान,उत्कंठा
10. उप	पास,समान	उपदेश,उपहार
11. दुर	बुरा,कठिन	दुर्जन,दुर्लभ
12. दुस/दुष	कठिन	दुस्साहस,दुष्कर
13.नि	नीचे,निषेध	निबंध,नियम
14. निर	बिना	निर्जन,निर्धन
15. निस	नहीं, रहित	निसंतान,निश्चल
16. परा	विपरीत, अनादर	पराक्रम,परामर्श
17. परि	चारोंओर	परिचय,परिजन
18. 耳	अधिक, आगे	प्रकार,प्रबल्
19. प्रति	सामनेविरुद्ध	प्रतिकार,प्रतिकूल
20. वि	विशेष,भिन्न	विकास,विनम्र
21. सम/स	संयोग	संचय,संशय
22. सु	अच्छा	सुजन,सुयश
23. स्व	अपना	स्वराज,स्वदेश
हिंदी के उपसर्ग:-	0.3	
1. 생:	अभाव,निषेध	अटल, अगम
2. अध	आधा	अधिखला,अधमरा
3. अन	नहीं,अभाव	अनजान,अनकहा
4. उन	कम	उन्नीस,उन्सठ
5. औ	हीन,निषेध	औगुण, औघट
6. क/कु	बुरी,बुरा	कपूत,कुमार्ग
7. दु 8. नि	बुरा,बुरी	दुखद, दुबला
	अभाव,नहीं	निडर, निकम्मा
9. बिन	बिना,निषेध	बिनदेखा,बिनपहचाना
10. भर	ठीक,पूरा	भरपेट, भरपाई

11. स	सहित,अच्छा	सरस,सबल
12. सु	अच्छा	सुपुत्र,सुविचार
13. चौ	चार	चौराहा,चौपाया
14. उप	पास, समान	उपहार,उपयोग
उर्दू के उपसर्ग:-		
1. ず中	थोड़ा	कमजोर,कमसिन
2. खुश	अच्छा	खुशामद, खुशहाल
3. गैर	भिन्न,अलग	गैरजिम्मेदार,गैरहाजिर
4. दर	में	दरअसलदरमियान
5. ना	नहीं, निषेध	नामुमकिन, नाफरमानी
6. बद	बुरा	बदनसीब, बदमिजाज
7. ৰা	अनुसार, सहित	बाअदब,बाकायदा
8. बिला	बिना	विलावजह,विलाकसूर
9. बे	बिन, अभाव	बेअदब,बेकायदा
10. ला	बिनी,नहीं	लाइलाज, लापता
11. हम12. हर	समान, साथ	हमउम्र, हमशक्ल
	प्रत्येक	हरदिनहरवक्त
	कार्यपत्रिका- 3	

- 1. नीचे दिए गए प्रत्येक उपसर्गसे दो दो शब्द बनाकर लिखिए उप,ला,अध,अनु,नि,।
- 2. दिए गए शब्दों में उपसर्ग लगाकर नया शब्द बनाइए दिन, योग,पेट,विचार,गुण।
- 4. एक शब्द के साथ अनेक उपसर्ग जोड़ कर शब्द बनाइए- हार, नाम,भाव,गुण,मान।

विषय – हिंदी

व्याकरण-+प्रत्यय

परिभाषा-वे शब्दांश जो शब्दों के अंत में लगकर नया शब्द बनाते हैं प्रत्ययक हलाते हैं। प्रत्ययके दो भेद होते हैं-

- 1.कृतप्रत्यय-इन में बने शब्द क र्ताअर्थातक्रिया को करने वाले का बोध कराते हैं।
- 2.तद्धितप्रत्यय-संज्ञा विशेषण और अव्यय के साथ प्रयोग किए जाने वाले प्रत्यय तद्धित प्रत्यय कह लाते हैं। कृतप्रत्यय:-

प्रत्यय		मूलशब्द	नयाशब्द
1.	अक	लिख,पठ,पच,चाल	लेखक,पाठक,धावक,चालक।
2.	अक्कड़	धूम,भूल,पी,बूझ	घुमक्कड़,भुलक्कड़
3.	आ ऊ	भिड़,चल,उड़	उँड़ाऊ,भिड़ाऊ,चलाऊ
4.	आक	तैर,चल	तैराक,चालाक
5.	आका	लड़,पढ़,धम	लड़ाका,पढ़ाका,धमाका
6.	आकू	लड़,पढ़,	लड़ाकू,पढ़ाकू
7.	इयल	सड, मर,अड	साड़ियल,मरियल
8.	इया	बढ़,घट,रस	बढ़िया,घटिया
9.	ক্ত	खा, चाल,रट	खाऊ,चालू
10.	एरा	लूट,बस,कम	लूटेरा,बसेरा
11.	हार	पालन,होना	पालनहार,होनहार
12.	वाला	रख,पढ़,देख	रखनेवाला,देखनेवाला
13.	औना	बिछ,खेल	बिछौना,खिलौना
14.	नी	ओढ़,कतर	ओढ़नी,कतरनी

15.	ना	पी,दौड़	पीना,दौड़ना
16.	आ	मेल,ठेल	मेला,ठेला
17.	न	बेल,सांड	बेलन,झाड़न
18.	नी	चट,मथ	चटनी,मथनी
19.	 ना	गा,बेल	गाना,बेलना
20.	 अंत	गढ़,रट	गढ़अंत,रतंत
21.	आई	लिख,पढ़	लिखाई,पढ़ाई
	आप/आपा	मिल,पूज	मिलाप,पूजापा
22.		ामरा,पूरा शक सर	
23.	आन	थक,चढ़	थकान,चढ़ान
24.	अव	बह,रिस	बहाव,रिसाव
25.	आवा 	भूल,छल	भुलावा,छलावा
26.	आवट	सज,थक	सजावट,थकावट
27.	ॴॣॖॖहूट	चिल्ला,घबरा	चिल्लाहट,घबराहट
28.	औती	मान,चुन	मनौती,चुनौती
29.	ती	चल,रूक	चलती,रुकती
30.	अन	चल,मिल	चलन,मिलन
31.	आ	चल,खिला	चला,खिला
32.	कर	गा,खा	गाकर,खाकर
33.	एरा	लूट,काम	लूटेरा,कमेरा
34.	या	गां,खा	गाया,खाया
तद्धित	प्रत्यय:-		·
1.	ई	सुख,तेल	सुखी,तेली
2.	आरी	पूजा,जुआ	पुजारी,जुआरी
3.	इया	रसोई,मुख	रसोईया,मुखिया
4.	आर 	सोना,लोटा	सुनारं,लोहार।
5.	क	बाल,चाल	बालक,चालक
6.	दार	दुकान,देन	दुकानदार,देनदार
7.	वाला	गाड़ी,रिक्शा	गाड़ीवाला,रिक्शावाला
8.	कार	कहानी,मूर्ति	कहानीकार,मूर्तिकार
9.	बां	दस,पांच	दशवा,पांचवा
		दो,तीन	दूसरा,तीसरा
10.	सरा	दो,तीन	दोगुना,तीनगुना
11.	गुना	छह,पहला	छठा,पहलौठा
12.	ਗ 	छर,परता एक,दो,तीन	इकहरा,दोहरा,तिहरा
13.	हरा		
14.	ता —	दानव,मानव	दानवता,मानवता
15.	पन	बच्चा,लड़का	बचपन,लड़कपन
16.	आहट	घबरा,चिकना	घबराहट,चिकनाहट
17.	आस	खट्टा,मीठा	खटास,मिठास
18.	नी	चांद,नथ	चांदनी,नथनी
19.	ल	लघु,मम	लघुत्व,ममत्व
20.	ई	भला,बुरा	भलाई,बुराई
21.	इमा	लाल,काला	लालिमा,कालिमा
22.	आपा	मोटा,बूढ़ा	मोटापा,बुढ़ापा
23.	एरा	मामा,फूफा	ममेरा, फुफेरा
24.	इक	धर्म,दिन	धार्मिक,दैनिक
	* '	, and the second	,

25 -	गंजान निरा	गंजाबी विचारी
25. ई	पंजाब,बिहार	पंजाबी,बिहारी
26. आल/हाल	ससुर,दादी	ससुराल,दिदहाल
27. डा	मुख,दुख	मुखड़ा,दुखड़ा
28. री	कोठा,छाता	कोठरी,छतरी
29. इया	डिब्बा,खाट	डिविया,खटिया
30. ਰੂ 31. वी	दया,श्रद्धा	दयालु,श्र्द्धालु
31. वी	तपस्या,मेघा	तपस्वी,मेघावी
32. ईला	चमक,रंग	चमकीला,रंगीला
33. वान	बल,गुण	बलवान,गुणवान
34. मान	बुद्धि,शक्ति	बुद्धिमान,शक्तिमान
35. <u>ज</u>	मोटा,पेट	मोटू,पेटू
36. ईय	राष्ट्र,आत्मा	राष्ट्रीय,आत्मीय
37. मय	दया,महिमा	दयामय,महिमामय
38. इत	पीड़ा,खंड	खंडित,पीड़ित
39. तर	लघु,निम्न	लघुतर,निम्नतर
40. तम	सुंदर,मधुर	सुंदरतम,मधुरतम
41. वती/मती	रूप,गुण	रूपवती,गुणवती
संस्कृतभाषाकेतद्धितशब्द-		
1.त्व	ममता,गुरु	ममत्व,गुरुत्व
2.ता	लघु,गुरु	लघुता,गुरुता
3.मय	दुख,जल	दुख्मय,जलमय
4.इत	हर्ष,आनंद	हर्षित,आनंदित
5 .नीय	दर्शन,प्रशंसा	दर्शनीय,प्रशंसनीय
6.अक़	घाव,लेख	धावक,लेखक
7.ਗ:	अंत,पूर्ण	अंतः,पूर्णतः
8.इमा	लाल,नीला	लालिमा,नीलिमा
उर्दूभाषाकेतद्धितप्रत्यय:-		
1. आना	रोज,जुर्म	रोजाना,जमाना
2. ई न	रंक,शौक	रंगीन,शौकीन
2. 3. गर	जादू,बाजी	जादूगर,बाजीगर
4. गी	मर्दाना,दीवाना	मर्दोनगी,दीवानगी
5. दान	पीक,रोशन	पीकदान,रोशनदान
6. नाक	शर्म,खतरा	शर्मनाक,खतरनाक
ৰাज	चाल,हवा	चालबाज,हवाबाज
	कार्यपत्रिका-3	
पश्र1 निम्नलिखित शब्दों से मल शब्द और	1.	। ŋ) भुलक्कड्,मिलन,बोलकर,लिखावट,पहनावा।

प्रश्न1.निम्निलेखित शब्दों से मूल शब्द और प्रत्यय अलग कीजिए-(कृतप्रत्यय) भुलक्कड़,मिलन,बोलकर,लिखावट,पहनावा। प्रश्न2.निम्निलिखित प्रत्यय से दो दो शब्द बनाइए-आऊ,आ,आई,वाला, इया। प्रश्न3.निम्निलिखित मूल शब्दों में तद्धितप्रत्यय लगा कर नया शब्द बनाइए-शर्म,गुण,कथन,मिहमा,सुंदर। प्रश्न4.निम्निलिखित मूल शब्दों में कृतप्रत्यय लगा कर नया शब्द बनाइए-तैर,लड़,चाल, चट,ओढ़।

Worksheet 3 SUBJECT-Bengali সারসংক্ষেপ ও অনুশীলনী- ২

কবিতা – রামচন্দ্রের বিলাপ

কৃত্তিবাস ওঝা রচিত রামায়নের অরণ্য কাণ্ড থেকে রামচন্দ্রের বিলাপ কবিতাটি গৃহীত। রামচন্দ্র সীতা ও লক্ষণ সহবনবাসে থাকা কালীন মায়াবী রাক্ষস মারীচকে হত্যা করে কুটিরে ফিরে আসারপর সীতা শূন্য কুটীর দেখে রামচন্দ্র লক্ষণের কাছে বিলাপ করতে থাকেন। তিনি সীতাকে কোথায় খুজেপাবেন সেই বিষয়ে লক্ষণের কাছে তাঁর মনের আকুতি প্রকাশ করেছেন। তিনি ভাবছেন সীতা হয়তো মুনি পত্নীর সহিত কোথাও গেছেন বা গোদাবরী তীরে কমল কাননে কমল মুখী ভ্রমণে গেছেন। পদ্মালয়া সীতাকে পদ্মমুখী দেখে পদ্মবনে লুকিয়ে রেখেছেন। চন্দ্রমুখী সীতাকে রাহ্মগ্রাস করেছে। রামচন্দ্রের মনে হয়েছে সে রাজ্যচ্যুত হয়েছে বলে পৃথীবি তার নিজের কন্যাকে হরণ করে নিয়েছে। বিমাতা কৈকেয়ীর মনেরবাসনা এত দিনেপূর্ণ হল।সূর্য, চন্দ্র, তারা দিন রাত্রীর অন্ধকার দূর করছে, কিন্তু রামচন্দ্রের মনের অন্ধকার সীতাছাড়া কেউ দূর করতে পারবে না।সীতার অনুপস্থিতিতে রামচন্দ্রের চারিদিক শূন্য হয়েগেছে। সর্প যেমন মণি হরিয়ে গেলে বিপন্ন হয়েযায় তেমনি সীতা হীন রামচন্দ্রকে মণিহারা সর্পের সাথে তুলনা করা হয়েছে।

প্রশ্ন অনুশীলন

- ১) জানকী কে?
- ২) কৈকেয়ীর মনোভীষ্ট কী ছিল?
- ৩) কারা দিবা নিশি অন্ধকার দূর করছে?
- ৪) 'হরিলেন পৃথিবী কী আপন দুহিতা'- পৃথিবীর আপন দুহিতা কে? তাকে হরণের কারণ কী?
- ৫) শব্দার্থ লেখ:- অনুজ, বিহনে, সদা, অন্বেষণ।
- ৬) বিপরীত শব্দ:- দিবাকর, জীবন, তিমির, শূন্য

HINDMOTOR HIGH SCHOOL Worksheet 3 SUBJECT-Mathematics

- 1. Percent means per hundred.
- 2. a percentage can be converted to a fraction by writing the % number in the numerator and 100 in the denominator and dropping % sign e.g. $89\% = \frac{89}{100}$ and $25\% = \frac{25}{100} = \frac{1}{4}$.
- 3. To change percentage to decimal divide by 100 e.g $25\% = \frac{25}{100} = \frac{1}{4} = .25$.
- 4. To change percentage to ratio write it as a fraction with denominator 100 and reduce to lowest term if possible ,e.g . $60\% = \frac{60}{100} = \frac{3}{5} = 3:5$.
- 5. To convert a fraction or decimal or ratio to percentage multiply by 100.
- 6. To work out a percentage of an amount :
- i) Write percentage as a fraction.
- ii) Multiply the fraction by the amount .

Example: 40% of Rs.820 = Rs. $\frac{40}{100} \times 820 = Rs.328$.

- 7. To find new value after percentage change:
- i) If there is increase, work out the increase and add it to the original amount.
 - ii) If there is decrease, work out the decrease and subtract it from the original amount.
- 8. Percentage change or error = $\frac{Actual\ change\ or\ error}{Original\ value} \times 100$.
- 9. To express one quantity as a percentage of other:
- i) Write one quantity as the fraction of the other
 - ii) Multiply by 100.

Example: Write 73 days as a percent of a year = $\frac{73}{365} \times 100\% = \frac{1}{5} \times 100\% = 20\%$

10. Original value = $\frac{100}{100+R}$ X New value when increased by R%.

 $=\frac{100}{100-R}$ X New value when decreased by R%.

Example: Find the original price of a book which has incread by 10% to 220

Here R = 10

Original price of the book = $\frac{100}{100+10} \times Rs.220 = Rs.\frac{100}{110} \times 220 = Rs.200$.

Worksheet

- 1. Write each of the percentage into fraction and decimal : a)15% b)12.5% c) $33\frac{1}{3}$ %
- 2. Write each of the following as percentage: a) $\frac{19}{20}$ b) $2\frac{2}{3}$ c)0.95
- 3. Find the following amounts: a) 12% of 600 b)48% of 1 lit. c) $7\frac{1}{7}$ % of 3 kg 500 gm
- 4. A metal bar is 2.4 m long. After heating its length increases by 2%. What is the new length.
- 5. A man gets a 15% hike in his salary. If his new salary is Rs.16,100. What was his original salary?
- 6. If A's income is 50% less than that of B, than B's income is what percent more than that of A.

HINDMOTOR HIGH SCHOOL

Worksheet 3
SUBJECT-Physics

Chapter - 1

Worksheet based on the previous synopsis:

1. Fill in the blanks:

- a. The change of state from solid to vapour is called ______
- b. _____ is the smallest unit of matter.
- c. _____ have no specific volume.
- d. Evaporation takes place from the _____ of the liquid.
- e. The conversion of a gas into a solid on cooling is called _____

2. State true and false:

- a. Matter is made up of atoms.
- b. Solid do not have a well defined volume . _____
- c. The boiling point of water is 0⁰ C.

d.	Evaporation takes place from the surface of the liquid
e.	Liquid acquire the shape of the vessel in which they are kept

- 3. Differentiate between element and compound with example.
- 4. Explain the postulate of kinetic theory of matter.
- 5. How does matter change its state? Explain.

Worksheet 3 SUBJECT-Chemistry Chapter: Matter

- Anything which occupy space that is volume and has mass is called matter.
- Matter exists in three states solid liquid and gas. Copper iron gold and silver exist in the solid state at room temperature. Water and oils exist as liquids at room temperature. Air, ammonia and hydrogen exists as gases at room temperature.
- Water can exist as ice (solid), water (liquid) and steam (gas).
- Particle nature of matter:
 - The particles of matter have empty space between them.
 - > Particles of matter are in constant motion.
 - > There is attraction power between particles of matter.
- The ability of a gas to spread and occupy the whole available space, irrespective of other gases present in its surroundings, is called diffusion.
- **Kinetic theory of matter** states that matter is made up of continuously moving tiny particles.
- By increasing or decreasing the temperature for fresher we can alter the physical state of matter.
- Law of conservation of mass: Mass is my mother created nor destroyed in chemical reactions.
- Matter can be divided into pure substances and mixed substances. Pure substances are further divided into elements and compounds.
- Elements are made up of only one kind of atom and cannot be broken into simpler substances by either physical or chemical methods.
- There are 118 known elements.
- Some elements exist naturally while some are prepared in laboratories.
- Hydrogen, oxygen, nitrogen, copper, iron, sodium, chlorine, magnesium and gold are some examples of elements.
- John Dalton was the first person to use symbols for representing elements.
- Later, abbreviations came into use. The abbreviations that are used to represent elements are known as chemical symbols. Each element has its own unique symbol.
- Most of the symbols are the first one or two letters of the elements name in English. The first letter of a symbol is always written in uppercase and the second letter in lowercase.some symbols have been taken from the names of elements in Latin German or Greek.
- Full form of IUPAC is International Union of Pure and Applied Chemistry.

WORKSHEET-3

1	Fill	in	the	h	lani	zc
1.	L' III	ш	uie	w	all	10.

A.	Matter includes both and
В.	our father divided into elements and compounds.
C.	was the first person to use symbols for representing elements.
D.	Mass is neither nor in chemical reactions.
Ε.	Particles of matter each other.
F.	The empty are vacant space between particles of matter is called
G.	is the symbol of Mercury.
Н.	There areknown elements.
[.	Water always contains hydrogen and oxygen in the ratio
J.	is used for separating fine insoluble solid particles from the liquid.

2. State whether the following are true or false.

- A. Both solids and liquids have definite volumes whereas gases do not have any definite volumes.
- B. In heterogeneous mixtures the composition is uniform and the properties are same throughout.
- C. The first letter of a symbol is always written in lowercase and the second letter in uppercase.
- D. Solids have maximum interparticle distance and weakest interparticle attraction.

HINDMOTOR HIGH SCHOOL

Worksheet 3 SUBJECT-Biology

Synopsis :-[Along with this consult the previous synopses]

Factors affecting transpiration rate

Factor	Explanation		
† temperature	↑ the kinetic (movement) energy of water molecules → they diffuse faster.		
† air movement (wind)	Removes water molecules as they pass out of the leaf → maintaining a steep concentration gradient for diffusion.		
↓ humidity	↓ the concentration of water molecules outside the leaf → steeper concentration gradient for diffusion.		
† light intensity	Stomata open to allow gas exchange for photosynthesis → water vapour can diffuse out of the leaf.		

Macro	Micro	
N - Nitrogen	Fe- Iron	
P- Phosphorus	Mn - Mangnanese	
K - Potassium	Cu - Copper	
S - Sulfur	Zn - Zinc	
Ca - Calcium	B - Boron	
Mg - Magnesium	Cl - Chloride	
	Mo - Molybdenum	

Macro nutrient-Needed by plant in large quantity

Micro nutrient:- Needed by plant in very small quantity

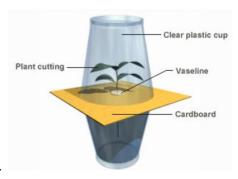


Fig:-Activity to show the process of transpiration

Worksheet 3

- A) Find the odd one out and give reason.
- i) Osmosis, diffusion, transpiration, active transport
- ii) Nitrogen, Potassium, Magnesium, Manganese
- B) Answer in one word.
- i) The phenomenon causes water molecule to stick to each other.
- ii) The absorption of mineral ions against the concentration gradient by spending energy.
- iii) The evaporation of water through the aerial parts of a plant.
- C) Answer the questions in brief.
- i) What are the factors those affect the rate of transpiration. Explain briefly.
- ii) What are macronutrients and micronutrients? Give two examples of each.
- iii) Explain the process of transpiration by an activity.

HINDMOTOR HIGH SCHOOL Worksheet 3 SUBJECT-History

Aurangzeb's wrong policies played the foremost role in bringing the downfall of the Mughal dynasty.

For 27 years, Aurangzeb stayed in Deccan to fight with the Marathas and the rulers of the Deccan kingdoms. As a result it adversely affected his administration in North India. The provincial Governors became powerful. Many broke away from the Mughal Empire after Aurangzeb's death. The successive wars drained the royal treasury. He even fought with a section of the Rajput's over Marwar's succession. So nobody was there to help Aurangzeb in his battles against the Marathas. He never followed religious tolerance. He exposed the pilgrimage tax or the 'Jizya' on the Hindus. This brought division among his subjects. This was also one of the reasons for his long battles with the Sikhs, Marathas and the Rajputs.

Invasions of Nadir Shah and Ahmad Shah Abdali also played an important role in bringing the downfall of the Mughal Empire:

The ruler of Iran, Nadir Shah invaded India in 1739 during Muhammad Shah's rule. He returned to Iran with a huge wealth that included Shah Jahan's Peacock Throne and the Kohinoor diamond. Ahmad Shah Abdali

invaded India many times between 1757 and 1761. The Mughal army was by then weakened by the Mansabdari crisis so they could not do much to check Abdali's army . Hence the Mughal Emperor's power diminished. In the usual course , there was a vacuum that was created in the declining Mughal Empire . This vacuum was filled by either the governors of Mughal provinces or the regional kingdoms which had earlier fought with the Mughals supremacy. This period saw the expansion of the Maratha Kingdom and the rise of the Sikhs, the Jats and the Rohillas. The provinces of Bengal, Awadh , Hyderabad and Mysore also became independent.

Worksheet based on the above synopsis:

- 1) How many years did Aurangzeb stay in the Deccan?
- 2) Why was the Royal treasury drained off during Aurangzeb's rule?
- 3) Why didn't Aurangzeb have any one to help him while he fought with the Marathas?
- 4) What was the tax imposed on the Hindus? How did it affect the Mughal Empire?
- 5) Who invaded India in 1739?
- 6) What did the ruler of Iran take away from India before returning back to Iran?
- 7) When did Ahmad Shah Abdali raid India?
- 8) Who filled the vacuum created by the declining Mughal Empire? Name the provinces which became independent during this period.

HINDMOTOR HIGH SCHOOL Worksheet 3 SUBJECT-Geography

Topic: Understanding Geography – Reading Maps –(Settlements)

Topic at a Glance: Settlements: Settlements means the places that have been inhabited by human population for living, cultivating, mining, or any order purpose.

- **Temporary settlement** In these settlements people do not live for a long duration. They build provisional arrangements like Tents or live in rented places of permanent dwellers. They keep shifting from place to place. Refugee camps, seasonal tourists, etc. are an example of Temporary Settlement.
- **Permanent Settlement** In these settlements, people build permanent houses. Permanent settlements are of two types Rural and Urban. Population in Rural settlements is less. People largely engaged in

agriculture, forestry, fishing, handicrafts, etc. The Cities and Towns constitute the urban settlement. Population here is more. People are largely engaged in manufacturing, trading, and services.

Settlement Patterns:

- **Dispersed settlement** Dispersed settlements a pattern where the houses or buildings are spread out with low population density. A dispersed settlement is also known as a scattered settlement. They are usually rural and often agricultural in nature.
- **Nucleated Settlement** This is a pattern where a lot of buildings or houses are grouped together. Nucleated settlements often develop around a conveniently located water supply, like a bend in a river.
- **Linear Settlement** Linear settlement is a pattern where the houses or buildings are built in alignment. For example, sometimes village settlements are spread along a river valley, road, embankment, and coastline.

Homework:

Answer the following:

- 1) Distinguish between Temporary and Permanent settlements.
- 2) What is settlement pattern? What are the types of settlement patterns?
- 3) Distinguish between Dispersed and Nucleated settlements.
- 4) Which type of settlements are built up by the Nomadic peoples?
- 5) Which type of settlements are found beside G.T Road?

*Computer worksheet will be given in the next time.

6) Suppose a group of workers have come from Malda district for a Building construction work in your school for a month long project. Which type of settlement will be built up by them? Give reason against your answer.