Class: PC  
Winter Vacations  
Sub: chemistry  
Home work

1. Define the following terms.  
   Atom, element, compound, mixture, atomic number, mass number, valency, symbol.

2. Write down symbols, atomic number and mass number of 1\textsuperscript{st} to 20\textsuperscript{th} element of periodic table an memorize them.

3. Write down the Latin name of following element/  
   Copper, gold, iron, Lead, mercury, potassium, silver, sodium, Tin, tungsten, antimony.

4. Write down the chemical formula of following compounds,  
   Table salt, soda ash, baking soda, lime stone, Gypsum, Lime water, sugar, caustic soda,

5. Find out at least five examples of homogenous and heterogeneous mixture form you daily life.

6. Write down the uses of Tin, steel, Gold copper and aluminum.

7. Write down the uses of oxygen nitrogen carbon, sulphar and chlorine.

8. Give 10 examples of compound and mixture form your daily life.


10. Draw bohr model for first 10 elements in periodic table by showing electronic arrangement.

11. Give a comparison between properties of metal and non-metals?

12. Find out the number of proton neutron and electron in following element.  
   \( ^{16}\text{O} \), \( ^{27}\text{Al} \), \( ^{39}\text{K} \), \( ^{207}\text{Pb} \), \( ^{184}\text{W} \)

13. Write down the name of 5 common acids?


15. What is an aerosol? How it is affected on our environment?
Winter Vacation Assignment
Pre-Cambridge
English
Q1. Write an essay of (150-200) words on the following topics:
   a. My Favorite Poet
   b. Environmental Pollution
   c. I Have Done Something No One Else Has Done.
   d. My First Friend
Q2. Write a story of (200-250) words on the following topics:
   a. What I Have Broken Or Lost That Belongs To Someone Else.
   b. My Unforgettable Adventure.
   c. Describe an important event of your family which you attended and it made you happy.
Q3. Write a letter to your mother who is worried about your health.
Q4. Write a letter to your friend congratulating him on his best performance in Final Term Exam.
Q5. Select any one from the given books and write a brief book review.
   i. Julius Caesar by William Shakespeare
   ii. Great Expectation by Charles Dickens
   iii. Treasure Island by Robert Louis Stevenson
   iv. The Great Gatsby by F. Scott Fitzgerald
Q6. Define all parts of speech and give 3 examples for each. And also use them in sentences of your own.
Q7. Write the definitions along with examples for the following literary terms:
   Assonance  Alliteration  Simile  Metaphor  Personification  pun  Anaphora

Winter Vocations  Class Pre Cambridge
Subject Islamiat  Homework
Naazra e Quran from paara (10 to 20)
Memorization of last fifteen surahs of Holy Quran
Memorization of Namaz e Janaza and 6 kalimas (with Arabic text and translation)
Memorization of supplications (given at the the end of pjc islamyat book)
A complete study of Seerat e rasool .
   • Makki life
   • Madni Life
History of Quran
   • Beginning
   • Revelation
   • Mode of Revelation
   • Compilation of Quran
Study of Biography of Famous personalities of Islam .
   • Hazrat Abu bakar
   • Ibn e Khuldoon
Good Character and behavior.
- Basic Ethics
- Role of Muslim to make society fruitful

A complete study of book Ibn e Khuldoon (Al Muqadmma) and write his views about modern Islamic thoughts and their reconstruction.

Winter Vacation Home Assignment (2019-2020)

Class: PC (New)
Subject: Physics

1. Enlist all the physical quantities along with their symbols and units of chapter # 01, 02 and 04
2. Enlist different type of forces given in unit no 01.
3. Enlist different type of energies given in unit no 02
4. Solve review exercise 1.11 of chapter 01 given at page # 28 in text book.
5. Solve review exercise 2.11 of chapter 02 given at page # 50 in text book.
7. Define the following terms, also write unite of each.
8. The Moon orbits the earth
   a) Write the name of motion of Moon revolving around the earth.
   b) What is the force that keeps the Moon in orbit around the earth?
9. Draw an energy transfer diagram in following cases
   a) A moving car
   b) An electric bulb
   c) A television that starts with the sun
10. A car transfers chemical energy in the fuel to kinetic energy, so the car moves;
    a) Which form or forms of energy are wasted?
    b) Draw an energy transfer diagram for the car.
11. Write the answers of the following questions.
    a) Define centripetal force, acceleration, deceleration,
    b) What do you means by elastic limit of a spring?
    c) Explain what is meant by streamlining of vehicles?
12. What are the useful energy and wasted energy in following cases
    a) A hair dryer
    b) A moving school bus
    c) A television
    d) A rotating ceiling fan
13. Write down the differences between.
    a) Balanced and unbalanced forces
    b) Force of friction and force of gravitation
    c) Tension force an upthrust force
    d) Gravitational potential energy and kinetic energy
    e) contact force and three non-contact force
14. Solve all the Numerical Problems written at the end of each exercise of Chapter # 01, 02 and 04.
15. Search for the following website link and attempt all the questions relevant to Chapter 01, 02 and 04 to improve your scientific approach and skills.

Home Assignment for Winter Vacations Social Studies
Q.1 Describe these different types of farming:
   a) Subsistence  b) Commercial    c) Manual
   d) Mechanized  e) Organic     f) Arable

Q.2 a) Why is wheat a very important crop worldwide?
   b) Which country is the world’s leading wheat produce?
   c) Which province of Pakistan are the best for growing wheat? What makes these provinces good for wheat?

Q.3a) Which country is the world’s main rice grower? Explain why this country is the main rice grower.
   b) Which parts of Pakistan are the main rice-growing areas, and why?
   c) Explain why rice is an important crop for Pakistan.

Q.4 a) Pakistan is a net exporter of food. What does this mean?
   b) Explain why it is good to be a net exporter of food.
   2. What is a cash crop?
   3. Use your Oxford school Atlas for Pakistan to help you to find the countries.

Q.5 a) Name two countries in Africa that grow cotton.
   b) Name two countries in South America that grow cotton.
   c) Use what you know about the land and climate to explain why China is among the leading cotton-growing countries.
   d) Which parts of Pakistan are the main cotton-growing areas, and why?
   e) List as many products of the cotton plant as you can think of.
   f) Choose three parts of the cotton plant and describe what they are used for.

Q.6 a) Which parts of Pakistan are the main sugar-growing areas, and why?
   b) Find out the meaning of ‘eco-friendly’.
   c) List as many products of sugar cane as you can.

Q.7 a) Name the world’s six main types of livestock in order, beginning with the largest population.
   b) Explain why cattle are very useful animals to farm.
   c) Describe some of the problems caused by overgrazing.

Q.8 a) Which climate zone is the main one for cattle farming? Explain why this is.
   b) Which province to Pakistan is the main one for livestock farming?

Q.9 Name four different types of poultry farming.
   Describe the three main types of main types of fishing industry.

Q.10 a) Which are the main regions of Pakistan for metal ores?
   b) Some of the metals in these regions are only just being extracted. Why do you think this is?

Q.11 a) Which are the main regions of Pakistan for metal ores?
   b) Some of the metals in these regions are only just being extracted. Why do you think this is?

winter vacation home work pc class Urdu

1. مضمون:
   1. اخبار بینی کے فوائد:
   حالات و واقعات کا علم۔
   حالات و واقعات کا علم۔
   ملکی و غیر ملکی خبریں
   تجارتی مد و جنگ کی
   تجارتی مد و جنگ کی
   فرم و شعر بیدا کرنا
   فرم و شعر بیدا کرنا
   ملکی و غیر ملکی خبریں
   ملکی و غیر ملکی خبریں

2. برسات کے موسم میں طوفانی بارش کی روداد لکھیں۔
   روداد:
   1. وطن کا مجھ کو بر ذریعہ پیرا پیا:
   2. برسات کی موسم میں طوفانی بارش کی روداد لکھیں۔

خط
1. Write a paragraph to explain the importance of probability in everyday life.  

2. Write a paragraph on the benefits and drawbacks of mobile phones.

Army Burn Hall College for Boys Abbottabad  
Home Assignment for Winter Vacations  
Subject: Mathematics  
Class: PC  
Middle Section  
Session: 2018-19

<table>
<thead>
<tr>
<th>S.No</th>
<th>Chapters</th>
<th>Exercise No</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chance (Probability) Page: 02-10</td>
<td>Ex 1B: Q1 to Q10 (All Parts) Page 06-09</td>
<td>To understand the meaning of probability and its scale, correctly calculating probabilities of outcomes of sample random events using correct notation.</td>
</tr>
</tbody>
</table>

Assignment

Archimedes, an ancient Greek, worked out that π was approximately \( \frac{22}{7} \).

a. Find \( \frac{7}{22} \) as decimal to find out how many decimal places of accuracy it gives for π.

b. Which is more accurate, \( \frac{22}{7} \) or 3.142?

c. Using Archimedes’ approximation, calculate the Circumference of a circle with diameter 14 cm.

d. Using Archimedes’ approximation, calculate the Circumference of a circle of radius 2.45 m.

e. Using Archimedes’ approximation, calculate the diameter of a circle whose circumference is 6.6 m.

Reference:  
Chapter No 31  
Circumference Page: 301-305

Note:  
Test of these exercises will be held in 1st week after vacations.

Winter Vacations Home Work (2019)  
New Class Pre-Cambridge (Biology)

Q1. Draw a diagram to show the process of photosynthesis.

Q2. Draw the diet chart to show the basic requirement of nutrients by the Human body.

<table>
<thead>
<tr>
<th>Time</th>
<th>Sun</th>
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<td>Breakfast</td>
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<td>Mid-Morning</td>
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</table>
Q3. Write the names of 04 organ systems with their respective organs.
Q4. Draw the Chart to show how each organ of digestive system is related?

Q5. Color and name them.
Q6. Collect the 10 pictures of vertebrates and invertebrates each. Write their scientific names as well as local names.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Local Name</th>
<th>Picture</th>
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<tbody>
<tr>
<td>1.</td>
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</table>
**Vocabulary Worksheet - Insects & Creepy Crawlies**

**Match words and pictures**

<table>
<thead>
<tr>
<th>Insects</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ant</td>
<td>1</td>
</tr>
<tr>
<td>b) bee</td>
<td>2</td>
</tr>
<tr>
<td>c) beetle</td>
<td>3</td>
</tr>
<tr>
<td>d) butterfly</td>
<td>4</td>
</tr>
<tr>
<td>e) caterpillar</td>
<td>5</td>
</tr>
<tr>
<td>f) centipede</td>
<td>6</td>
</tr>
<tr>
<td>g) cricket</td>
<td>7</td>
</tr>
<tr>
<td>h) dragonfly</td>
<td>8</td>
</tr>
<tr>
<td>i) flea</td>
<td>9</td>
</tr>
<tr>
<td>j) grasshopper</td>
<td>10</td>
</tr>
<tr>
<td>k) ladybird</td>
<td>11</td>
</tr>
<tr>
<td>l) millipede</td>
<td>12</td>
</tr>
<tr>
<td>m) mosquito</td>
<td>13</td>
</tr>
<tr>
<td>n) moth</td>
<td>14</td>
</tr>
<tr>
<td>o) scorpion</td>
<td>15</td>
</tr>
<tr>
<td>p) spider</td>
<td>16</td>
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<tr>
<td>q) stick insect</td>
<td>17</td>
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<tr>
<td>r) wasp</td>
<td>18</td>
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</tbody>
</table>

**Write the words** (more than 1 answer possible)

1. It eats insects: ________________________________
2. It stings: ________________________________
3. It jumps: ________________________________
4. It lives on other animals: ________________________________