INTERNATIONAL PRIME SCHOOL

Worksheet: Week-5; Sub: Mathematics

Class: VIII

1. In ΔABC, $a = 5\ cm$, $b = 7\ cm$, and $\angle C = 60°$. Find c.

2. In $\Delta GHI, g = 9cm$, $i = 7\ cm$ and $\angle H = 30°$. Find h.

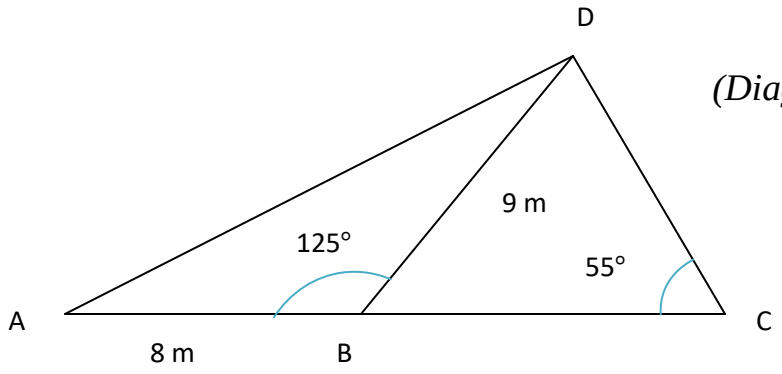
3. In ΔMNO , $m = 4.2\ cm$, $n = 5.8\ cm$ and $\angle O = 141.4°$. Find o.

4. In ΔXYZ , $x = 7\ m$, $y = 8\ m$ and $z = 9\ m$. Find the unknown angles.

5. In ΔABC , $AB = 6.7\ cm$, $BC = 3.8\ cm$ and $AC = 5.3\ cm$. Find the size of the smallest angle.

6. In ΔPQR , $PQ = 7.8\ cm$, $QR = 9.1\ cm$ and $PR = 4.9\ cm$. Find the size of the largest angle.

7. In the figure, the point B lies on AC such that $AB = 8\ m, BD = 9\ m, \angle ABD = 125°$ and $\angle BCD = 55°$.



(Diagram not accurately drawn)

Find

i) the length of CD, ii) the length of AD.

8. Simplify:

i) $\frac{a^2-4b^2}{a^2-9x^2} \times \frac{a-3x}{a+2b}$

ii) $\frac{x^3-y^3}{x^2-y^2} \div \frac{x^2+xy+y^2}{x^2+2xy+y^2}$

iii) $\frac{3a^2-6ab}{x^2-y^2} \times \frac{a+2b}{3a^2-12b^2} \times \frac{x+y}{a}$

iv) $\frac{x^2-5x+6}{x^2-4} \times \frac{x^3+8}{x^2-9}$

v) $\frac{a^3+b^3}{a^3-b^3} \div \frac{a^2-ab+b^2}{a^2+ab+b^2}$

vi) $\frac{a^2-9}{a^2-4} \times \frac{a+2}{a-3}$

vii) $\frac{x^2+7xy+12y^2}{x^2-y^2} \div \frac{x+4y}{x-y}$

viii) $\frac{a^2x^2-4a^2}{x^2-9} \times \frac{x+3}{ax+2a}$

ix) $\frac{5a^2-25ab}{a^2-6ab+5b^2} \times \frac{a^2-b^2}{a^2+ab}$

x) $\frac{x^3+8a^3}{x^2+2ax+4a^2} \div \frac{x^2-2ax+4a^2}{x^3-8a^3}$

xi) $\frac{a^3+b^3}{a^2-b^2} \times \frac{a+b}{a-b} \times \frac{a^2+ab}{(a+b)^2}$

xii) $\frac{a^2+3a}{a^2+4a+3} \times \frac{a^2-2a-3}{a^2-9}$

xiii) $\frac{x^2+5x+6}{x^2-4} \div \frac{x^2+3x}{x-2}$

xiv) $\frac{x^2-4x+3}{x^2+x-6} \div \frac{x^2+3x-4}{x^2+7x+12}$

xv) $\frac{x^2-2x-15}{x^2+x-12} \times \frac{x^2+3x-18}{x^2+x-30}$

xvi) $\frac{a(a^2-b^2)}{a^2+4ab+3b^2} \div \frac{a^2-ab}{a+3b}$

xvii) $\frac{x^2+x(a+b)+ab}{x^2+x(a+b)+bc} \times \frac{x^2+x(a+c)+ac}{x^2+2ax+a^2}$

xviii) $\frac{x(a^2-b^2)}{x^3+y^3} \times \frac{x^2-xy+y^2}{x^2a-xa^2} \times \frac{x^2-a^2}{2b} \times \frac{2ab}{a^2-b^2}$

INTERNATIONAL PRIME SCHOOL

Class: VIII, Sub: ICT

Worksheet: 05

1. Explain why CAPTCHA tests work.
2. Write short note on Pharming and Phishing.
3. Explain “Collaborative Working” with benefits.
4. Write short note on Cyberbullying.
5. Write short notes.
   (a) Session cookies
   (b) President cookies
   (c) Third-Party cookies
6. State what is meant by the term ‘Cloud’.

Week 5

Geography

Class VIII

Ch: 17

a. What is drainage basin?
   Drainage basin is the area of a river catchment.
b. What is drainage density?
   Drainage density is the number of river in a particular area.
c. Write the formula of drainage density.
   $$\frac{\text{Area}}{\text{Number of river}}$$
d. What is discharge?
   Discharge is the amount of water flow in a particular time period.
e. What is hydrograph?
   Hydrograph is the graph to predict the flood in a drainage basin.
f. What is lag time?
   In hydrograph, lag time is the difference between time in maximum flow and minimum flow.
g. How many sections are there in river?
   There are two sections of a river.
h. What are they?
   Upstream river and downstream river.

Diagram:

Drainage basin

Cross-section of river course

Graph:

Draw a hydrograph and label it

Week 5

History

Class VIII

Ch: 16

Multiple Choice Answers : (Answers are marked in bold form)

(a) One reason the Chinese Communists were able to gain control of China was the support of the

(i)Peasants (ii) landed elite (iii) foreigners (iv) warlords

(b) The Cultural Revolution in China was Mao Zedong's attempt to

(i) renew the ideas and enthusiasm of the Communist revolution

(ii) increase the industrial output of China

(iii) promote artistic exchanges with the United States

(iv) encourage foreign investment in China

(c) The Long March is significant in Chinese history because it

(i) ended Japanese occupation of China
(ii) reinforced the concept of the Mandate of Heaven
(iii) caused the Boxer Rebellion
(iv) established Mao Zedong as a revolutionary leader

(d) One way in which the Great Leap Forward and the Four Modernizations are similar is that each was an attempt to

i. increase farm and factory output
ii. develop a democratic government
iii. strengthen economic ties with communist neighbors
iv. reduce the gap between rich and poor

(e) In China, the Revolution of 1911 and the demonstrations in Tiananmen Square in 1989 were similar in that each event

i. succeeded in overthrowing the existing government
ii. resulted in foreign military intervention
iii. sought to bring about democratic reforms
iv. made land reform a major goal

(f) The goal of Mao Zedong's policy known as the Great Leap Forward was to

i. develop foreign export industries in China's coastal urban centers
ii. eliminate state-owned industries in rural China
iii. modernize China's economic system by dividing China into communes
iv. introduce capitalism to the Chinese economy

(g) By the late 1970s in China, the growing size of its population influenced the government's decision to

i. encourage people to migrate to other countries
ii. force families to work on communes
iii. engage in wars to gain territory
iv. institute a one-child policy

(h) During China's Cultural Revolution, a major goal of the Red Guard was to

i. revive traditional loyalty to the emperor
ii. promote trade and free enterprise
iii. enforce the teachings of Mao Zedong
iv. encourage cooperation with the Soviet Union

(i) In 1989, the government of China responded to the challenge of protests in Tiananmen Square by

i. halting trade with the West
ii. allowing democratic elections
iii. sending in tanks and troops to end the demonstrations
iv. calling for a special session of the United Nations Security Council

(j) In 19th-century China, the Opium War resulted in

i. the control of Hong Kong being returned to China
ii. the removal of all British naval forces from China
iii. an increase in European spheres of influence in China
iv. the rejection of Buddhism by the Chinese people

(k) The Cultural Revolution in China was Mao Zedong's attempt to

i. renew the ideas and enthusiasm of the Communist revolution
ii. increase the industrial output of China
iii. promote artistic exchanges with the United States
iv. encourage foreign investment in China

Week 5

Bangladesh Studies

Class VIII

Broad Question:

a) What are the impacts of poor air quality in Dhaka city?

Short Questions:

a) What is prediction?
b) What is adjustment?
c) What is risk assessment?

Table:

a) Make a table of some possible adjustment actions to natural hazards in Bangladesh.

Work sheet-5

Class-VIII

Biology

1. What is meant by vegetative propagation?
2. Write the differences between stolons and rhizome?
3. Write down about bulbs and corms.
4. Describe about tissue cultured.
5. Compare Between sexual reproduction and vegetative propagation.

বাংলা

বাংলা ভাষার জন্মকথা

১। শব্দার্থ লিখ:

তবু, শতাব্দী, দুর্বোধ্য, ঘনিষ্ঠ, উদ্ভূত।

2। বাক্য রচনা কর

ভাষাতাত্ত্বিক, শ্লোক, ঘনিষ্ঠ, উৎপত্তি

শতাব্দী।

৩। প্রশ্নগুলোর উত্তর দাও

ক) 'সংস্কৃত' শব্দের অর্থ কী? একদল লোক

বাংলাকে 'সংস্কৃতের মেয়ে' মনে করত কেন?

*) বাংলা ভাষার উৎপত্তি কোন ভাষা থেকে?

এ বিষয়ে বিভিন্ন ব্যকরিণবিদদের মতামত আলোচনা

কর।

ব্যকরণ অংশ

৪। ভাব-সম্প্রসারণ লিখ:

আলো বলে, অন্ধকার তুই বড় কালো।

অন্ধকার বলে, ভাই, তাই তুমি আলো।"

৫। রচনা লিখ:

ক) উড়াল সেতু

খ) একটি পুরাতন কাহর

International Prime School

Subject: Chemistry ; Class: VIII

1. What is an acid ? Give examples.
2. How can you test an acid ?
3. Classify acids with examples.
4. What is an alkali ? Give examples.
5. Give a test for an alkali.
6. Classify alkalis with examples.
7. What is neutralization reaction ?
8. Write chemical equations for the reactions that take place between
   i) NaOH and HCl
   ii) KOH and HNO_3
   iii) NaOH and H_2SO_4
   iv) $Ca(OH)_2$ and HCl
9. What is pH ? Name the colours that universal indicator gives in strong acid, weak acid, strong alkali and weak alka